FINDINGS REGARDING THE ENVIRONMENTAL EFFECTS FOR THE METROPOLITAN BAKERSFIELD GENERAL PLAN UPDATE

SCH # 1989070302

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EXHIBIT A
STATEMENT OF FACTS AND FINDINGS

I. INTRODUCTION

The following statement of facts and findings have been prepared in accordance with the California Environmental Quality Act (CEQA) and Public Resources Code Section 21081. CEQA Guidelines Section 15091 provides that:

> *"No public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless the public agency makes one or more of the following findings:*

The following potential significant impacts of the proposed project have been separated into three categories:

(1) Those potential impacts that have been determined to be less than significant, based on review of available information in the project record, and in consideration of existing standard development review requirements and existing codes and regulations;

(2) Those potential impacts that could be mitigated to a level that is considered less than significant with the implementation of the recommended mitigation measures; and

(3) Those potential impacts that could not be reduced to a less than significant level with the implementation of the existing policies and standards and the recommended mitigation measures.

For potentially significant impacts (categories (2) and (3) above), the City of Bakersfield ("City") and County of Kern has made one of the following three findings for each potentially significant impact and provides facts in support of each finding in accordance with CEQA Guidelines Section 15091:

a. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.

b. Those changes or alterations required in the project to mitigate or avoid significance environmental effects are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.

c. *Specific economic, social, or other considerations make infeasible the mitigation measures or project alternatives identified in the final environmental impact report."*

The Final EIR for the Metropolitan Bakersfield General Plan Update identifies certain significant environmental effects which may occur as a result of the project. Therefore, findings are set forth herein pursuant to Section 15091 of the CEQA Guidelines. The Summary of Mitigation Measures is based in part on the requirements contained in Section 21081.6 of the Public Resources Code (see Exhibit B). A Mitigation Monitoring Program will be adopted as part of the project Resolution.

II. PROJECT DESCRIPTION

The Metropolitan Bakersfield General Plan Update Planning area includes the City of Bakersfield, its designated sphere of influence and contiguous properties located in the unincorporated portions of Kern County. Approximately 408 square miles of both City and County lands are included as part of the Metropolitan Bakersfield General Plan Update. The boundaries of the Planning area were mutually agreed upon by the City of Bakersfield and the County of Kern as part of the joint adoption of the Metropolitan Bakersfield 2010 General Plan in 1990.

The Planning area is located at the eastern portion of southern San Joaquin Valley, in the County of Kern (refer to Exhibit 3-1, *Regional Vicinity*). Kern County is the third largest county in California, covering approximately 8,142 square miles. The County borders Ventura and Los Angeles Counties to the south, San Luis Obispo and the tip of Santa Barbara Counties to the west, Kings, Tulare and Inyo Counties to the north and San Bernardino County to the east.

The Metropolitan Bakersfield area (i.e., Planning area) is located at the base of the Sierra Nevada Mountains, within the west central portion of Kern County. The Planning area covers approximately 408 square miles and is characterized by a core of urban and suburban land use types that were developed along the principal north-south arterial of the Central Valley, Highway 99, and the Kern River. The core area is generally surrounded by low intensity agriculture, oil production and open spaces in which small communities historically developed as agricultural centers.

As localities and their resources are ever changing, it is periodically necessary to update and revise the general plan. The state recommends that the entire plan be thoroughly reviewed and revised periodically to reflect new conditions, local attitudes and political realities. In addition, the short-term portions of the general plan should be reviewed annually and revised as necessary to reflect new implementation tools, changes in funding sources, and the results of monitoring the effectiveness of past decisions. The update to the Metropolitan Bakersfield General Plan was intended to make those changes necessary to more accurately reflect existing goals, policies and implementation measures. The text revisions are intended to give an updated version of the existing development environment.

The Final EIR evaluates potential environmental impacts resulting from the following revisions to the Metropolitan Bakersfield General Plan, including but not limited to:

- Deletion of redundant and/or completed policies, goals and programs.
- Revision to maps, figures, text, charts and tables to reflect updated data/information.
- Update of the City and County's land use database.
- Update of the Kern Council of Governments (COG) traffic model information.
- Revision to General Plan noise and air quality data based on the new traffic model.

Section 65300 of California Planning and Zoning Law requires each county and city jurisdiction to adopt a comprehensive, long-term general plan for its development. It must contain seven principal elements including Land Use, Circulation, Housing, Conservation, Open Space, Noise, and Safety. The Metropolitan Bakersfield General Plan contains each of these elements, and in addition has incorporated two optional elements to reflect the specific needs and objectives of the Planning area: Public Services and Facilities, and Parks. Chapter "reservations" for the Kern River Plan Element and Historical Resources Element are also included. The Housing Element revision is under a separate effort.

III. FINDINGS WITH RESPECT TO SIGNIFICANT EFFECTS

The City and County of Kern, as Lead Agency and decision-maker for the project, has reviewed and considered the information contained in both the Draft and Final EIRs prepared for the Metropolitan Bakersfield General Plan Update and the public record. The Lead Agency makes the following finding pursuant to CEQA and the CEQA Guidelines:

1. The City and County of Kern, as Lead Agency and decision-maker, having reviewed and considered the information contained in the Draft and Final EIRs prepared for the Metropolitan Bakersfield General Plan Update and public records, finds that changes or alterations to the project will avoid or substantially lessen potentially significant environmental impacts. These changes or alterations are related to the implementation of the mitigation measures detailed in this document.

2. The City and County of Kern, as Lead Agency and decision-maker, having reviewed and considered the information contained in the Draft and Final EIRs prepared for the Metropolitan Bakersfield General Plan Update and the public record, finds that there are specific economic, social, or other considerations which make the mitigation measures for Traffic/Circulation, Air Quality, Noise and Soils and Agricultural Resources in the Draft and Final EIR's infeasible.

3. The City and County of Kern, as Lead Agency and decision-maker, finds that significant and unmitigable impacts on Traffic/Circulation, Air Quality,

Noise and Soils and Agricultural Resources, may occur with future development in conjunction with implementation of the Metropolitan Bakersfield General Plan Update. This finding requires that the Lead Agency issue a "Statement of Overriding Considerations" under Section 15093 and 15126(b) of the State CEQA Guidelines if the Lead Agency wishes to proceed with approval of the project.

IV. FINDINGS WITH RESPECT TO THE ENVIRONMENTAL REVIEW PROCESS

The City and County of Kern, acting as Lead Agency for the environmental review of the project, makes the following findings with regard to the environmental review process undertaken to analyze the potential environmental impacts of the project:

1. Due to the decision to prepare an Environmental Impact Report (EIR), an Initial Study was not prepared. This is pursuant to Section 15063(a) of the CEQA Guidelines, which states that if the Lead Agency determines an EIR will be required for a project, the Lead Agency may skip further initial review and begin work on the EIR.

2. Pursuant to the provisions of Section 15082 of the State CEQA Guidelines, as amended, the City of Bakersfield, as Lead Agency, circulated a Notice of Preparation (NOP) to public agencies, special districts, and members of the public requesting such notice for a 30-day period commencing on July 23, 2001, and concluding on August 23, 2001.

3. During the circulation period for the Notice of Preparation, the City of Bakersfield, as Lead Agency, advertised and conducted a public scoping meeting on August 16, 2001 at the [FILL IN LOCATION] in the City of Bakersfield.

4. A Draft EIR was prepared which analyzed project-related impacts related to the following environmental issue areas: land use; aesthetics/light and glare; traffic and circulation; air quality, noise, geologic and seismic hazards, soils and agricultural resources, hydrology and drainage, biological resources, cultural resources, public services and facilities, parks and recreation, public health and safety, and mineral and energy resources. Project alternatives, growth-inducing impacts, and cumulative effects were also analyzed in the Draft EIR.

5. During the Draft EIR's public review period which began on [FILL IN DATE] and concluded on [FILL IN DATE], the City of Bakersfield held a noticed City Council public hearing at the regularly-scheduled meeting of [FILL IN DATE] regarding the Draft EIR. The public was afforded the opportunity to orally comment on the Draft EIR at the public hearing, and the testimony was considered by the decision-makers. Upon the close of the public review period, the Lead Agency proceeded to evaluate and prepare

responses to all written comments received from both citizens and the public agency during the public review period.

6. The aforementioned comments and responses and other information consistent with the requirements of Section 15132 of the State CEQA Guidelines, as amended, comprise the Final EIR. Following completion of the Response to Comments document, the Lead Agency's responses to the comments received from the public agencies were transmitted to those public agencies for consideration at least 10 days prior to the Final EIR's certification.

V. FINDINGS REGARDING EFFECTS DETERMINED TO BE INSIGNIFICANT OR LESS THAN SIGNIFICANT

The City finds that based on substantial evidence appearing of the Final EIR, Technical Appendices and in the administrative record, that the proposed project would have insignificant or less than significant impacts in the following areas:

LAND USE

THE GENERAL PLAN UPDATE COULD CONFLICT WITH EXISTING PLANS, POLICIES OR REGULATIONS.

Impact Analysis: Future development in the Planning area is anticipated to be in accordance with the Land Use Element of the General Plan which contains a map and text describing the Planning area's future land use pattern. The Land Use Policy Map (available at the City and County offices) presents the distribution of land uses in the Planning area. Total acreages for each of these land use designations are presented in Table 4.1-2, *Percentage of Land Use Within Primary Land Use Categories*, of the Final EIR. Two basic principles govern the Plan: new development is focused into distinctive centers separated by low land use densities and new development is situated such that it takes advantage of the environmental setting. These principals are defined as the "centers" and "resource" concepts, respectively.

The "centers" concept provides for a land use pattern consisting of several concentrated mixed-use commercial and high density residential centers surrounded by medium density residential uses. Single-family residential uses are the primary uses located between these mixed-use commercial/residential centers. This concept encourages people to live and work in the same area, thereby, minimizing sprawl and reducing traffic, travel time, infrastructure costs, and air pollution. In addition to promoting the formation of several large concentrated mixed-use centers, the Plan also attempts to consolidate smaller, neighborhood-serving commercial development by prescribing minimum distances between commercial parcels and by discouraging strip commercial development.

The "resources" concept emphasizes the siting of development to reflect the Planning area's natural and visual resources: its river, canals, and foothills. Also, the "resources" concept uses as a point of departure, the 1985 Kern River Plan Element (as amended) which takes advantage of the recreational potential of the river while respecting the river's

sensitive natural habitats and aesthetic resources. The Plan encourages linkages to unique resources and includes Policies to promote utilization and sensitivity of natural and visual resources.

The General Plan Update's basic principles governing development in existing urban areas and peripheral areas are as follows:

EXISTING URBAN AREAS

The General Plan Update provides the following basic principles for development of existing urban areas:

(a) The preservation and conservation of existing residential neighborhoods whose identity is characterized by the quality and maintenance of existing construction, stability, and reputation as a "special" place in the community;

(b) The infill of vacant parcels at prevailing densities;

(c) Recycling and intensification of areas which are physically or economically depressed; and

(d) The provision of open space linkages where feasible to the Kern River and foothill areas.

Strip commercial and sprawling residential land use patterns, which lack consolidation or focus are inconsistent with principles defined in the General Plan Update. In addition, the General Plan Update provides for the preservation of stable, primarily single-family[1] neighborhoods by allowing for a reduction in the densities from those permitted by the current General Plan.

PERIPHERAL AREAS

New development on the periphery of urban Bakersfield is intended to be focused at five new mixed use activity centers generally located in the southwest, northwest and northeast. More specifically, these centers would be located at Rosedale Ranch, the rural northwest, California State University Bakersfield, an area west of Buena Vista Road and an area east of Morning Drive, along SR-178. It is expected that the southwest center would include a mix of professional office and retail uses, moderate density residential, and would filter outwards to lower suburban-type densities. Figure II-3 of the 1990 General Plan illustrates the land uses in policy concept form. However, actual land use designations for the southwest center and the surrounding area would be determined through a more detailed land use and environmental analysis. Focused analysis of this area is considered necessary due to it's growth potential and its associated impacts (i.e., impact on prime agricultural lands and potential to impact the Kern River corridor resource). The northwest center would contain retail commercial, light industrial, moderate and high density residential, and would be surrounded by low and estate residential densities. The center in the northeast would include retail commercial,

[1] "Primarily single-family" is defined as those neighborhoods in which 75 percent or more of the units are of "LR" density (7.26 du/net acre) or less and are in a state of good repair.

professional office, moderate and high density residential, and would filter outwards to lower densities. The General Plan encourages the following for each center:

(a) Focus on a major open space amenity, such as a park or water body;

(b) Link land uses to the Kern River where possible; and

(c) Exhibit pedestrian sensitivity with appropriate design applied to encourage pedestrian activity.

In addition to these activity centers, peripheral development would be focused in smaller community centers, such as in the Greenfield and Lamont areas, with local-serving commercial services and residential uses.[2]

Generally, the sphere of influence boundaries were utilized to help define the boundaries of planned urban growth. There are three exceptions to this definition of boundaries: the southwest center, Oildale and Lamont. The southwest commercial center itself is situated within the sphere-of-influence area. However, the "lower suburban-type density" residential uses associated with the southwest center extend beyond the western boundary of the present sphere of influence. According to the General Plan, justification for extending beyond the sphere of influence boundary includes the following: (a) rapid growth has already taken place in this direction in recent years and shows no signs of slowing; (b) the area presents an opportunity to capitalize on the Kern River as a visual and aesthetic resource; and (c) the ease with which services may be extended. The second exception to the sphere-of-influence defined boundaries occurs in Oildale. In particular, a major airport terminal including supporting commercial and industrial uses is master planned just north of the existing terminal at Meadows Field, beyond the sphere-of-influence boundaries. Finally, the unincorporated community of Lamont, which supports the surrounding agricultural community, is a residential and commercial urban center within the Metropolitan area.

The General Plan Update for Metropolitan Bakersfield has refined and supplemented policies regarding future development within the Planning area. As described in Section 3.0, *Project Description*, of the Final EIR, the General Plan Update does not propose any changes to existing density standards and/or floor area ratio (FAR) assumptions, nor does the Plan involve any changes to existing land use designations. Although there are no physical land use changes in the General Plan Update, the Update would produce a beneficial effect by making the General Plan a more effective planning tool to review future projects and to coordinate with other jurisdictions and regulatory agencies on regional planning and environmental matters.

[2] These unincorporated communities are recognized as unique agricultural-related communities within the Metropolitan area that are separate and distinct from the City of Bakersfield. The distinctive identities of these communities within the Metropolitan area should be encouraged through subsequent actions that implement the General Plan.

The General Plan Update contains policies and implementing actions that continue to support current procedures followed by the City/County when development applications are reviewed, including the referral of plans to appropriate federal, state, regional, and adjacent jurisdictions and agencies to assure consistency between City/County and other agency regulations and requirements. General Plan Update policies and actions recognize that all communities within the area have an interest in area-wide land use and transportation planning, economic development, environmental protection, and the provision of adequate services and facilities.

Policies and programs in the General Plan Update continue to provide for implementation of and participation in area-wide planning efforts. An analysis of the consistency of the General Plan Update with specific federal, state, regional, and local plans is presented below.

Federal Plans and Policies

Clean Air Act. The General Plan Update is in compliance with policies/regulations of the Clean Air Act. The Conservation/Air Quality Element of the Plan contains goals and policies consistent with the Clean Air Act. These goals and policies are detailed in Section 4.4, *Air Quality*, of the Final EIR. Goals which have been identified include the following:

- Promote air quality that is compatible with health, well being, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants.

- Continue working toward attainment of Federal, State and local standards as enforced by the San Joaquin Valley Unified Air Pollution Control District.

- Reduce the amount of vehicular emissions in the planning area.

Clean Water Act (Section 404). The General Plan Update contains goals and policies designed to protect water resources (including wetlands) and enhance water quality. These goals and policies are detailed in Section 4.8, *Hydrology and Drainage*, of the Final EIR, and Section 4.9, *Biological Resources*, of the Final EIR. Additionally, any future development permitted through implementation of the Plan would be subject to permit requirements of the U.S. Army Corps of Engineers. The General Plan Update is in compliance with the Clean Water Act.

National Pollutant Discharge Elimination System Permit Program. The General Plan Update provides goals and policies designed to protect water quality. These goals and policies are detailed in Section 4.8, *Hydrology and Drainage*, of the Final EIR. Development allowed through implementation of the proposed Plan would be required to implement storm water management practices during and after construction in accordance with the NPDES permit. The General Plan Update is in compliance with the NPDES program.

Federal Endangered Species Act. The General Plan Update provides goals and policies designed to protect plant and animal life in critical wildlife habitat and wetlands. These goals and policies are detailed in Section 4.9, *Biological Resources*, of the Final EIR. The City of Bakersfield and County of Kern have determined that the appropriate approach to conservation of protected biological resources in the Metropolitan Bakersfield area is through the habitat conservation planning process (i.e., the Metropolitan Bakersfield Habitat Conservation Plan). The City and County obtained permits under Section 10(a)(1)(B) of the United States Endangered Species Act for incidental take of protected

species in connection with development projects. Through the ongoing discretionary review process, the City preserves habitat and avoids take of protected species in compliance with the MBHCP. The General Plan Update is consistent with the Federal Endangered Species Act.

State Plans and Policies

California Wetlands Policy. Development pursuant to the General Plan Update with the potential to affect marshlands and designated wetlands would be subject to the requirements of the California Department of Fish and Game streambed alteration agreements. These agreements require the avoidance of wetlands and implementation of mitigation measures for any related wetlands impacts. In addition, the General Plan Update contains goals and policies designed to protect wetlands. These goals and policies are detailed in Section 4.9, *Biological Resources.* The General Plan Update is in compliance with this policy.

California Endangered Species Act. The General Plan Update provides goals and policies designed to protect plant and animal life in critical wildlife habitat and wetlands. These goals and policies are detailed in Section 4.9, *Biological Resources.* The General Plan Update is in compliance with the California Endangered Species Act.

Regional and Local Plans/Policies

Regional Plans

2000 Regional Transportation Plan and Congestion Management Program. These documents are both long-range policy documents that address transportation issues and propose mitigation programs to meet the multi- and inter-modal transportation objectives of Kern County. The General Plan Update proposes to update the City's traffic model based on the Kern Council of Governments (COG) traffic model information. An update to the City's traffic model would reflect Kern COG's current data relative to population growth, traffic growth, and air quality improvements. In this regard, the General Plan Update would be in compliance with 2000 Regional Transportation Plan and Congestion Management Program.

1991 Air Quality Attainment Plan. Refer to Section 4.4, *Air Quality,* for a discussion of the General Plan Update's consistency with the Air Quality Attainment Plan and an outline of the goals and policies relative to air quality.

Local Plans

Kern River Plan Element. The following two implementation programs specifically address compliance with the Kern River Plan Element:

- Open Space Element: Implement Kern River Plan Element policies regarding development sensitivity to the river resource.

- Safety/Flooding Element: Comply with the regulations and guidelines contained in the City/County adopted Kern River Plan Element of the City and County General Plans, and the zoning and floodplain management regulations which implement

the Plan.

Additionally, the Land Use, Conservation, Open Space, Safety, and Parks Elements of the General Plan include goals and policies pertaining to Kern River corridor resources. These goals and policies are intended to avoid impacts to Kern River corridor resources and generally involve the following:

- Siting of new development in relation to the River;
- The provision of transportation facilities;
- The provision of open space/ trail links;
- The creation of activity corridors;
- Preservation of natural resources;
- Continued maintenance;
- Management of surface water supplies; and
- Provision of recreation resources.

The General Plan Update is in compliance with the Kern River Plan Element after implementation of the specified programs, goals, and policies regarding Kern River corridor resources.

Bakersfield Airpark and Meadows Field Master Plans. Land uses proposed in the General Plan Update are generally consistent with land use designations proposed in the airport Master Plans. The City and County have adopted the Airport Land Use Compatibility Plan. The General Plan Update has identified an implementation program which requires review of the airport master plans for conformance with the Airport Land Use Compatibility Plan and General Plan. The program requires that the Plans be amended as necessary to make them compatible. Additional implementation programs identified in the General Plan Update require that: each airport prepare and periodically update a plan discussing future expansion, improvements, and operations; and that consideration be given to aviation easements for discretionary projects to provide for orderly development and as a means of preventing new noise and safety impacts. The General Plan has specified a policy to "ensure compatibility between the General Plan, airport master plans and airport land use plans." After compliance with the specified programs and policy, the General Plan Update would be considered consistent with the Bakersfield Airpark and Meadows Field Master Plans.

Specific Plans

It is the intent of the General Plan Update to incorporate those specific plans within the boundaries of the Planning area, by reference, and to make provision for the adoption of future specific plans as may be desired or required.[3]

State law requires that specific plans contain measures to implement all the policies in the General Plan for specific plan areas, and include measures to implement policies in optional elements. While approved City and County specific plans are generally provided for on the proposed land use plans, some General Plan designations only approximate specific plan designations. The General Plan Update has included the following policy with respect to compliance with specific plans:

[3] Metropolitan Bakersfield General Plan Update, Introduction, January 2002.

"Allow for flexibility in the specific siting of multi-family residential and commercial uses from the locations generally depicted on the Land Use Map in areas which are undeveloped, used for resource production, or are developed at very low densities through Planned Unit Development, Planned Commercial Developments and Specific Plans, provided that. . . ."

Specific plans are intended to be an amplification of the goals and policies of the General Plan Update and are, therefore, consistent therewith. The Land Use Plan Map for the General Plan Update replicates land use designations of these specific plans schematically. To determine exact land use designations within presently existing, or any subsequently adopted, specific plans, it is necessary to refer to those adopted documents. Thus, the General Plan has anticipated certain inconsistencies between the Land Use Map and specific Plans. A less than significant impact is anticipated in this regard.

Other Approved Plans/Project

Redevelopment Plans

As previously noted, three redevelopment plans exist in the Planning area: the Southeast Bakersfield Redevelopment Area; the Old Town Kern-Pioneer Redevelopment Area; and the Downtown Redevelopment Area. The General Plan Update has included various policies with respect to redevelopment plans. Two of these policies specifically address the Downtown Redevelopment Area providing for the area's revitalization through California law and exempting the area from the Level of Service Ordinance. The remaining policies generally involve the use of redevelopment authorities and the provision of recreational facilities. The General Plan Update is anticipated to result in a less than significant impact with respect to redevelopment plans.

Goals and Policies in the General Plan Update: The Land Use, Circulation, and Parks Elements contain the following goals and policies:

LU-G-5 Accommodate new development which capitalizes on the Planning area's natural environmental setting, including the Kern River and the foothills.

CIR/AP-G-2 Develop, operate, and maintain Meadows Field and Bakersfield Municipal Airpark to meet aviation needs in the metro area.

OS-G-5 Create 20 major tree-covered corridors that connect to and include the Kern River Parkway, safe bikepaths and GET bus routes.

OS-G-6 Create greenbelt corridor along the Kern River with increased recreational opportunities.

SAF/FL-G-3 Maintain adequate flood flow capacity in the Kern River channel to prevent flooding from anticipated 100 year design flood flows.

LU-P-39 Enhance existing and establish new centers as the principal focus of development and activity in the Planning area, around which other land uses are grouped. Centers should be linked by adequate transportation facilities and may be linked to the Kern River, canals, or other resource amenities. Centers may be differentiated by functional activity, density/intensity, and physical character.

LU-P-40 Provide for the enhancement and intensification of existing "centers" such as:

a) Downtown
b) California State University, Bakersfield
c) Bakersfield Airpark/Casa Loma
d) Meadows Field
e) Highway 58/Weedpatch Highway
f) Lamont
g) Greenfield
h) McAllister Ranch
i) Northwest Bakersfield
j) Rosedale Ranch

LU-P-42 Provide for the revitalization of downtown Bakersfield by the use of redevelopment authorities provided by California law, including the provision of incentives for new private development projects, joint private-public partnerships, and public improvements; accommodating the range of land uses defined for this "Center".

LU-P-45 Allow for the development of a center in southwest Bakersfield which is a focal point of activity and includes a mix of professional office and retail uses, moderate density residential, and filters outward to lower suburban-type densities, according to the following principles:

a) Encourage focus on an open space amenity such as a park or water body;

b) Provide opportunity for the development of residential units above ground floor commercial;
c) Encourage land use link with the Kern River and promote pedestrian activity within center.

LU-P-46 Allow for the development of centers in northwest Bakersfield to serve the Rosedale Community and adjacent rural areas, containing retail commercial, light industrial, moderate and high density residential, and is surrounded by low and estate residential densities, according to the following principles:

a) Attempt to focus on open space amenities;

b) Promote pedestrian activity and where feasible attempt to link land uses with the Kern River.

LU-P-68 Capitalize on the Kern River, parks, steep hills, and canals as organizational elements for the Bakersfield area, creating activity corridors around which development and recreational uses can be focused.

LU-P-81 Allow for flexibility in the specific siting of multi-family residential and commercial uses from the locations generally depicted on the Land Use Map in areas which are undeveloped, used for resource production, or are developed at very low densities through Planned Unit Development, Planned Commercial Developments and Specific Plans, provided that:

a) The overall density and distribution of land uses is maintained;

b) Multi-family and commercial uses are located in proximity to principal roadways, public transit, employment nodes, commercial services, and recreational uses and within 330 feet of the location depicted on the Land Use Policy Map;

c) Uses are sited to take advantage of pedestrian greenbelts, recreational amenities, and natural environmental resources;

d) The availability of infrastructure to the site or adjacent service areas is not adversely impacted.

LU-P-83 Provide for the use of redevelopment authorities in other locations of the metropolitan area which California Redevelopment law has determined as blighted.

LU-P-96 Where possible, utilize land encumbered with electrical transmission line easements to provide open space linkages, the Kern River corridor, trail systems and commercial/employment centers.

CIR/ST-P-38 Exempt the downtown Bakersfield redevelopment area and small infill projects from the Level of Service standard to facilitate infill projects and downtown redevelopment and in recognition of the higher traffic levels inherent to a vital central core.

CIR/AP-P-2 Ensure compatibility between the general plan, airport master plans and airport land use plans.

CON/BR-P-2 Preserve areas of riparian vegetation and wildlife habitat within floodways along rivers and streams, in accordance with the Kern River Plan Element and channel maintenance programs designed to maintain flood flow discharge capacity.

CON/MR-P-6 Continue implementation of the Kern River Channel Maintenance Program for extraction of river sand and gravel.

CON/WR-P-4 Support programs and policies which assure continuance or augmentation of Kern River surface water supplies.

OS-P-1 Promote the establishment, maintenance and protection of the Planning areas open space resources, including the following:

a) Conservation of natural resources (refer to Chapter II-Land Use, Chapter V-Conservation, and Chapter XII Kern River Plan Element).

- Kern River corridor
- Management of hillsides

b) Managed production of resources

- Agriculture (refer to Chapter V-Conservation/Soils and Agriculture)
- Oil production (refer to Chapter V-Conservation/Mineral Resources)

c) Outdoor recreation

- Parks (refer to Chapter XI-Parks)
- Kern River corridor (refer to Chapter II-Land Use, Chapter V-Conservation, and Chapter XII-Kern River Plan Element)

d) Public health and safety

- Hazard avoidance (refer to Chapter VIII-Safety)

OS-P-5 Development location and siting should be sensitive to its relationship to the Kern River.

OS-P-18 Establish open space/trail linkages from the NBOSA to public and quasi public facilities such as CALM, Hart Park, soccer park, Lake Ming and the Kern River Corridor.

SAF/FL-P-2 Maintain adequate levees along the Kern River channel throughout the Planning area.

SAF/FL-P-3 Prevent urban development encroachment which would impede flood flows in the Kern River designated floodway.

SAF/FL-P-4 Remove sand and excessive plant growth from the Kern River channel as required to maintain channel capacity through the planning area.

PAR-P-6 Provide additional neighborhood and community parks and recreation acreage in areas substantially developed or in the process of redevelopment or improvement, using a combination of public funds, in lieu developers fees, and benefit assessment districts.

PAR-P-14 Plan for and expend regional recreation opportunity in connection with the development and conservation of appropriate areas along the Kern River.

PAR-P-15 Designate multiple purpose areas for recreation and park use within the Kern River Plan area and in accordance with the goals and policies in the Kern River Plan Element.

PAR-P-18 Attempt to provide special recreational programs for seniors on fixed incomes, latch-key children, and the economically disadvantaged.

DEVELOPMENT IN ACCORDANCE WITH THE GENERAL PLAN UPDATE HAS THE POTENTIAL TO RESULT IN LAND USE COMPATIBILITY IMPACTS.

Impact Analysis: Generally, the intermixing of land uses has the potential to result in land use incompatibilities. Land use compatibility impacts associated with land development are a factor of quality of life issues, including, but not limited to traffic, noise, air quality, risk, and aesthetics (views/physical scale). While these may generally be perceived as subjective issues, the significance criteria detailed in each of the respective issues sections in this EIR provide a basis for assessing land use compatibility impacts.

The goals, objectives, policies and standards contained in the Land Use Element encourage architectural and site compatibility in designated areas. Additionally, the Circulation, Conservation, and Open Space Elements of the General Plan Update have identified goal and policies which are inducive to land use compatibility. The identified goals include accommodating new development which is compatible with and complements existing land uses and the establishment of a built environment which achieves a compatible functional and visual relationship among individual buildings and sites. Additionally, as part of their on-going development review process, the two jurisdictions carries out various duties which serve to implement those goals and policies inducive to land use compatibility. In essence, procedures of the respective jurisdictions provide the vehicle by which the concept of compatibility is implemented.

Based on these factors, implementation of the proposed General Plan Update would not result in direct impacts regarding land use compatibility within the Plan area.

Goals and Policies in the General Plan Update: The Land Use Element contains the following goals and policies:

LU-G-3	Accommodate new development which is compatible with and complements existing land uses.
LU-G-7	Establish a built environment which achieves a compatible functional and visual relationship among individual buildings and sites.
LU-P-6	Retain existing residential neighborhoods as designated on the Land Use Plan, and allow for the infill of residential land uses which are compatible with the scale and character of the surrounding neighborhood.
LU-P-13	Require that new multiple family residential projects incorporate design features such as screen walls and height and setback restrictions which foster compatibility with adjacent existing and future single-family residential uses.
LU-P-17	Ensure that adequate lands are set aside for neighborhood- serving commercial uses adjacent to designated residential areas. Where land has not been set aside, permit neighborhood scale commercial uses in residential areas when compatible with surrounding development.
LU-P-25	Provide for infill of commercial land uses to be compatible with the scale and character of existing commercial districts and corridors.
LU-P-26	Encourage adjacent commercial uses to be of compatible height, setback, color and materials.
LU-P-27	Require that new commercial uses maintain visual compatibility with single-family residences in areas designated for historic preservation.
CIR/AP-P-2	Ensure compatibility between the general plan, airport master plans and airport land use plans.
CON/MR-P-7	Promote development of compatible uses adjacent to mineral extraction areas.
CON/MR-P-8	Allow development of resource extraction sites subject to the conditional use permit procedure in zones where such uses are not permitted by right and where it can be shown that proposed extraction uses are compatible with surrounding uses.
CON/MR-P-11	Prohibit incompatible development in areas which have a significant potential for harm to public health, safety and welfare due to mineral and petroleum extraction and processing.
OS-P-9	Encourage depleted resource extraction sites to be restored as

alternative open space or developed with uses compatible with those adjacent.

AESTHETICS

DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE GENERAL PLAN MAY ADVERSELY AFFECT SCENIC VIEWSHEDS/VISTAS WITHIN METROPOLITAN BAKERSFIELD.

Impact Analysis: New development in accordance with the General Plan Update has the potential to adversely affect viewsheds and/or scenic vistas due to grading and placement of structures on previously undeveloped land. Scenic vistas are located solely within the northeast portion of Metropolitan Bakersfield. The General Plan Land Use Element identifies the potential for new development on the periphery of urban Bakersfield which would be consistent with designated mixed-use activity centers located in the southwest, northwest and northeast. Future urban land uses that would occur within the scenic viewshed areas include low-density, estate, suburban and rural residential uses. These land uses would convert existing agricultural and/or vacant land to urbanized uses. Analyses of topographical features indicate that the most significant ridgelines in the northeast portion of Metropolitan Bakersfield would not be affected by urban development. However, the proposed urban land uses could potentially alter secondary ridgelines and result in undesirable cut and fill grading in areas with considerable topographical relief.

General Plan implementation programs include requirements for proposed development projects to undergo environmental and design review on a site-specific, project-by-project basis to ensure compliance with code requirements in areas of topographical relief. Applicable requirements include the Hillside Management Ordinance that regulates development in areas of excessive slope by minimizing visual impacts resulting from grading in hillside areas in northeast Bakersfield. As a result of General Plan Update goals and policies listed below, along with project-specific environmental and design review by the City and/or County, aesthetic impacts to scenic vistas/viewshed impacts are considered less than significant. Ministerial projects will undergo site plan review in accordance with the City and County Zoning Ordinance.

Through the implementation of the General Plan Update's Land Use and Open Space Elements goals and policies, the visual environment and character of Metropolitan Bakersfield would maintain the high level of quality desired by both the City and County.

Goals and Policies in the General Plan Update: The Land Use and Open Space Elements contain the following applicable goals and policies:

LU-G-5 Accommodate new development which capitalizes on the Planning area's natural environmental setting, including the Kern River and the foothills.

LU-G-6 Accommodate new development that is sensitive to the natural environment, and accounts for environmental hazards.

LU-P-47 Allow for the development of a low density "village-like" center in the Northeast as a focal point of activity which includes retail commercial, professional offices, moderate and high density residential, and filtering outwards to lower densities, according to the following principles.

a) Attempt to focus on open space amenities;

b) Cluster development to take advantage of views;

c) Encourage development to preserve public views of foothill topography and sensitive habitats;

d) Provide the opportunity for the development of residential units above ground floor commercial;

e) Promote pedestrian activity and use of greenbelt links between land uses.

OS-P-1 Promote the establishment, maintenance and protection of the Planning areas open space resources, including the following:

a) Conservation of natural resources (refer to Chapter II-Land Use, Chapter V-Conservation, and Chapter XII Kern River Plan Element).

- Kern River corridor
- Management of hillsides

b) Managed production of resources

- Agriculture (refer to Chapter V-Conservation Soils and Agriculture)
- Oil production (refer to Chapter V-Conservation Mineral Resources)

c) Outdoor recreation

- Parks (refer to Chapter XI-Parks)
- *Kern River corridor (refer to Chapter II-Land Use, Chapter V-Conservation, and Chapter XII-Kern River Plan Element)*

d) Public health and safety

- Hazard avoidance (refer to Chapter VIII-Safety)

OS-P-2 Development of ridge lines within the Planning area should consider natural topographic constraints.

OS-P-3 Hillside development should exhibit sensitivity and be complementary to the natural topography.

OS-P-4 Require the use of grading techniques in hillside areas which preserve the form of natural topography and ridge lines.

OS-P-5 Development location and siting should be sensitive to its relationship to the Kern River.

OS-P-6 Development on or adjacent to bluff areas should complement the natural topographic integrity of such areas.

DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE GENERAL PLAN UPDATE COULD AFFECT SCENIC RESOURCES WITHIN METROPOLITAN BAKERSFIELD.

Impact Analysis: Implementation of the General Plan Update would result in an increase in the amount of residential and non-residential development in the community and therefore alter the existing aesthetic environment. Specifically, implementation of the General Plan Update would result in an intensification of land uses in designated areas. Land use intensification has the potential to alter landforms, scenic vantage points, overall character and potentially affect scenic resources. However, many of the outstanding resources (such as the major ridgelines in the northeast, scenic recreational areas in Kern County River Park, Lake Ming, and the Kern River Corridor) are set aside for preservation or open space and, therefore, would not be adversely affected by future growth. Impacts to scenic recreation areas, including the area surrounding Lake Ming, are considered to be less than significant because City and County policies and implementation actions set forth in the Parks and Recreation Element, Kern River Element and Open Space Element promote the establishment, maintenance and protection of open space and recreational resources.

Currently, Metropolitan Bakersfield contains several scenic areas located on undeveloped and/or vacant land, which allow for unobstructed views. However, several of these scenic vantage points are not located in areas designated for open space or preservation land uses, but rather for residential land uses. Future development involving residential land uses around these areas could potentially obstruct views. Impacts to all scenic areas are considered to be less than significant because future development would be guided by the City's and/or County's policies and implementation actions set forth in the Land Use Element, Open Space Element and the City/County Hillside Ordinances. Thus, natural features that provide topographical relief to Metropolitan Bakersfield would not be

significantly altered by future development due to site-specific environmental and design review of development plans by City and/or County staff.

Impacts on water courses are also considered to be less than significant because City and County policies and implementation actions set forth in the Kern River Element and Open Space Element provide for the preservation of the Kern River riparian community, and the preservation and/or enhancement of water courses as natural open space features.

Development within the visual corridors scenic rights-of-way highways could degrade visual quality if appropriate setbacks and rights-of-way are not provided or if development obstructs long-range scenic views. Also, views along these corridors could be degraded if landscaping and architectural designs are of poor quality. The potential for aesthetic impacts along scenic highways from new development is considered less than significant based on the anticipated fulfillment of requirements set forth for projects by the County of Kern General Plan, specifically the Land Use, Open Space, Conservation, and Recreation Element. The Elements seek to protect and enhance scenic areas adjacent to designated scenic routes/highways and outline measures to preserve scenic land. The review of development plans by the City would ensure the preservation of visually attractive natural and manmade features along Metropolitan Bakersfield's scenic highway corridors.

Goals and Policies in the General Plan Update: The Land Use and Open Space Elements contain the following applicable goals and policies:

LU-G-3 Accommodate new development which is compatible with and complements existing land uses.

LU-G-5 Accommodate new development which capitalizes on the Planning area's natural environmental setting, including the Kern River and the foothills.

LU-G-6 Accommodate new development that is sensitive to the natural environment, and accounts for environmental hazards.

LU-G-7 Establish a built environment which achieves a compatible functional and visual relationship among individual buildings and sites.

OS-G-1 Conserve and enhance the unique aspects of open space within the Planning area.

OS-G-2 Create an integrated system of open space amenities in the Planning area.

OS-G-3 Locate and site development to minimize the disruption of open space areas.

LU-P-47 Allow for the development of a low density "village-like" center in the Northeast as a focal point of activity which includes retail commercial, professional offices, moderate and high density residential, and filtering outwards to lower densities, according to the following principles.

a) Attempt to focus on open space amenities;
b) Cluster development to take advantage of views;
c) Encourage development to preserve public views of foothill topography and sensitive habitats;
d) Provide the opportunity for the development of residential units above ground floor commercial;
e) Promote pedestrian activity and use of greenbelt links between land uses.

LU-P-68 Capitalize on the Kern River, parks, steep hills, and canals as organizational elements for the Bakersfield area, creating activity corridors around which development and recreational uses can be focused.

LU-P-71 Encourage landscaping the banks of flood control channels, canals, roadways and other public improvements with trees to provide a strong visual element in the Planning area.

LU-P-79 Provide for an orderly outward expansion of new "urban" development (any commercial, industrial, and residential development have a density greater than one unit per acre) so that it maintains continuity of existing development, allows for the incremental expansion of infrastructure and public services, minimizes impacts on natural environmental resources, and provides a high quality environment for living and business.

OS-P-1 Promote the establishment, maintenance and protection of the Planning areas open space resources, including the following:

a) Conservation of natural resources (refer to Chapter II-Land Use, Chapter V-Conservation, and Chapter XII Kern River Plan Element).

- Kern River corridor
- Management of hillsides

b) Managed production of resources.

- Agriculture (refer to Chapter V-Conservation Soils and Agriculture)
- Oil production (refer to Chapter V-Conservation Mineral Resources)

c) Outdoor recreation.

- Parks (refer to Chapter XI-Parks)
- Kern River corridor (refer to Chapter II-Land Use Chapter V-Conservation, and Chapter XII-Kern River Plan Element)

d) Public health and safety.

- Hazard avoidance (refer to Chapter VIII-Safety)

OS-P-2 Development of ridgelines within the Planning area should consider natural topographic constraints.

OS-P-3 Hillside development should exhibit sensitivity and be complementary to the natural topography.

OS-P-4 Require the use of grading techniques in hillside areas that preserve the form of natural topography and ridge lines.

OS-P-5 Development location and siting should be sensitive to its relationship to the Kern River.

OS-P-6 Development on or adjacent to bluff areas should complement the natural topographic integrity of such areas.

DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE GENERAL PLAN UPDATE COULD DEGRADE THE VISUAL CHARACTER OR QUALITY OF METROPOLITAN BAKERSFIELD.

Impact Analysis: The General Plan Update designates areas within the northeast portion of Metropolitan Bakersfield as scenic resources. These resources are associated with the Kern River Corridor and elevated natural land features that provide topographical relief. It is recognized that new development projects may obstruct views from or to these scenic resources. In addition to the important scenic resources, physical elements such as landscaping, architecture, signs, streets, open space, etc., collectively form the area's visual environment and character. New projects may create development that is out of scale or character with the surrounding urban environment. However, most new development projects would undergo environmental and design review on a site-specific, project-by-project basis to ensure visual compatibility and enhancement with the surrounding environment.

Furthermore, strategies are also in place to provide development guidance to the downtown area. These strategies include: increasing the amount of green spaces (i.e., parks), expanding the downtown street light and streetscape design, develop a center for community activities and outdoor enjoyment, encourage water

systems (i.e., fountains, pools, ponds, etc.), encourage private courtyards and landscaped spaces that provide opportunities for formal and informal land use and activities, and develop permanent displays that recognize historical places. Also, through the implementation of the General Plan Update's Land Use, Conservation, Parks, and Open Space Elements goals and policies, the visual environment and character of Metropolitan Bakersfield would obtain the high level of quality desired by the City and County. Therefore, with the goals policies in the General Plan Update listed below, along with project-specific environmental and design review by the City and/or County, visual quality impacts are considered to be at a less than significant level.

Goals and Policies in the General Plan Update: The Land Use and Open Space Elements contain the following applicable goals and policies:

LU-G-3 Accommodate new development which is compatible with and complements existing land uses.

LU-G-5 Accommodate new development which capitalizes on the Planning area's natural environmental setting, including the Kern River and the foothills.

LU-G-6 Accommodate new development that is sensitive to the natural environment, and accounts for environmental hazards.

LU-G-7 Establish a built environment which achieves a compatible functional and visual relationship among individual buildings and sites.

CON/MR-G-4 Protect land, water, air quality and visual resources from environmental damage resulting from mineral and energy resource development.

OS-G-1 Conserve and enhance the unique aspects of open space within the Planning area.

OS-G-2 Create an integrated system of open space amenities in the Planning area.

OS-G-3 Locate and site development to minimize the disruption of open space areas.

OS-G-4 Acquire new lands for open space.

OS-G-5 Create 20 major tree-covered corridors that connect to and include the Kern River Parkway, safe bikepaths and GET bus routes.

OS-G-6 Create greenbelt corridor along the Kern River with increased recreational opportunities.

PAR-G-5 Coordinate development of park facilities and trail systems throughout the plan area which enhance the centers concept and complement unique visual or natural resources.

LU-P-24 Encourage the clustering of commercial development in compact areas, rather than extended along streets and highways.

LU-P-25 Provide for infill of commercial land uses to be compatible with the scale and character of existing commercial districts and corridors.

LU-P-26 Encourage adjacent commercial uses to be of compatible height, setback, color and materials.

LU-P-27 Require that new commercial uses maintain visual compatibility with single-family residences in areas designated for historic preservation.

LU-P-28 Require that commercial development provide design features such as screen walls, landscaping and height, setback and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to noise, traffic, parking, and differences in scale.

LU-P-32 Protect existing industrial designations from incompatible land use intrusions.

LU-P-34 Provide for the clustering of new industrial development adjacent to existing industrial uses and along major transportation corridors.

LU-P-35 Encourage upgrading of visual character of heavy manufacturing industrial areas through the use of landscaping or screening-of visually unattractive buildings and storage areas.

LU-P-42 Provide for the revitalization of downtown Bakersfield by the use of redevelopment authorities provided by California law, including the provision of incentives for new private development projects, joint private-public partnerships, and public improvements; accommodating the range of land uses defined for this "Center."

LU-P-43 Encourage renovation and the adaptive reuse of significant cultural and entertainment facilities downtown.

LU-P-47 Allow for the development of a low density “village-like” center in the Northeast as a focal point of activity which includes retail commercial, professional offices, moderate and high density residential, and filtering outwards to lower densities, according to the following principles:

a) Attempt to focus on open space amenities;

b) Cluster development to take advantage of views;

c) Encourage development to preserve public views of foothill topography and sensitive habitats;

d) Provide the opportunity for the development of residential units above ground floor commercial;

e) Promote pedestrian activity and use of greenbelt links between land uses.

LU-P-61 Coordinate a consistent design vocabulary between city and county for all public signage, including fixture type, lettering, colors, symbols, and logos.

LU-P-63 Encourage the use of creative and distinctive signage which establishes a distinctive image for the Planning area and identifies principal entries to the metropolitan area, unique districts, neighborhoods and locations.

LU-P-67 Develop a distinctive identity for the Bakersfield region which differentiates it as a unique place in the Southern San Joaquin Valley.

LU-P-68 Capitalize on the Kern River, parks, steep hills, and canals as organizational elements for the Bakersfield area, creating activity corridors around which development and recreational uses can be focused.

LU-P-69 Allow variation in the use of street trees, shrubs, lighting, and other details to give streets better visual continuity and increased shade canopy.

LU-P-70 Provide for the installation of street trees which enhance pedestrian activity and convey a distinctive and high quality visual image.

LU-P-71 Encourage landscaping the banks of flood control channels, canals, roadways and other public improvements with trees to provide a strong visual element in the Planning area.

LU-P-72 Promote the establishment of attractive entrances into communities, major districts, and transportation terminals, centers, and corridors within the Planning area.

LU-P-74 Encourage the establishment of design programs which may include signage, street furniture, landscape, lighting, pavement treatments,

public art, and architectural design.

LU-P-79 Provide for an orderly outward expansion of new “urban” development (any commercial, industrial, and residential development having a density greater than one unit per acre) so that it maintains continuity of existing development, allows for the incremental expansion of infrastructure and public services, minimizes impacts on natural environmental resources, and provides a high quality environment for living and business.

LU-P-84 Provide incentives to upgrade deteriorating residential, commercial and industrial uses when the property owner or resident cannot afford improvements.

LU-P-85 Encourage the revitalization of deteriorated land uses and buildings.

LU-P-88 Encourage the recycling of dilapidated and economically- depressed residential neighborhoods, commercial districts, and industrial areas, where preservation is not an achievable or desirable objective.

LU-P-89 Encourage new uses and buildings in pedestrian sensitive areas to incorporate design characteristics which include:

a) Walls which are aesthetically treated by the use of color, materials, offset planes, columns, and/or other architectural details, to provide visual interest to pedestrians;

b) Landscaping, including trees, flowering shrubs, and ground cover;

c) Pedestrian amenities, such as benches, trash receptacles and signage oriented to the pedestrian;

d) Design amenities related to the street level such as awnings, arcades, and paseos;

e) Visual access to the interior of buildings;

f) Uses other than parking and traffic circulation between the sidewalk and building.

OS-P-1 Promote the establishment, maintenance and protection of the Planning areas open space resources, including the following:

a) Conservation of natural resources (refer to Chapter II-Land Use, Chapter V-Conservation, and Chapter XII Kern River Plan Element).

- Kern River corridor
- Management of hillsides

b) Managed production of resources

- Agriculture (refer to Chapter V-Conservation Soils and Agriculture)
- Oil production (refer to Chapter V-Conservation Mineral Resources)

c) Outdoor recreation

- Parks (refer to Chapter XI-Parks)
- Kern River corridor (refer to Chapter II-Land Use Chapter V-Conservation, and Chapter XII-Kern River Plan Element)

d) Public health and safety

- Hazard avoidance (refer to Chapter VIII-Safety)

OS-P-2 Development of ridge lines within the Planning area should consider natural topographic constraints.

OS-P-3 Hillside development should exhibit sensitivity and be complementary to the natural topography.

OS-P-4 Require the use of grading techniques in hillside areas that preserve the form of natural topography and ridge lines.

OS-P-5 Development location and siting should be sensitive to its relationship to the Kern River.

OS-P-6 Development on or adjacent to bluff areas should complement the natural topographic aesthetic integrity of such areas.

LIGHT AND GLARE RESULTING FROM NEW DEVELOPMENT ASSOCIATED WITH THE GENERAL PLAN UPDATE COULD ADVERSELY AFFECT SENSITIVE RECEPTORS SUCH AS RESIDENTIAL USES AND WILDLIFE.

Impact Analysis: During evening hours, street lights, security lighting, recreational lighting and lighting from multi-story structures, if not adequately focused or screened, may cause spill-over lighting and glare that may present a nuisance to residential uses or act as a deterrent to wildlife in sensitive habitat areas. During daylight hours, glare from materials used in new buildings may also present a nuisance or a potential safety hazard by distracting motorists.

Development associated with the General Plan Update would convert agricultural and/or vacant land to urbanized uses. The new urbanized uses would create additional sources of light and glare.

The General Plan Update provides goals and policies that would serve to reduce the severity of aesthetic impacts associated with light and glare resulting from buildout of Metropolitan Bakersfield. The General Plan Update also provides programs that serve to implement the goals and policies that address light and glare in Metropolitan Bakersfield. Implementation programs include adoption of community wide standards for street lighting and requiring that development projects undergo environmental and design review on a site-specific basis to ensure that light and glare impacts would not substantially impact adjacent uses. Therefore, with the goals and policies in the General Plan Update listed below, along with project-specific environmental and design review by the City and/or County, impacts resulting from lighting and glare are considered to be at a less than significant level.

Goals and Policies in the General Plan Update: The Land Use Element contains the following applicable goals and policies:

PSF/SL-G-1 Provide uniform and adequate public lighting for all developed and developing portions of the Planning area.

PSF/SL-G-2 Develop uniform Planning area street light location and design standards.

PSF/SL-G-5 Provide for adequate lighting on public grounds where night use is encouraged.

LU-P-28 Require that commercial development provide design features such as screen walls, landscaping and height, setback and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to noise, traffic, parking, and differences in scale.

LU-P-29 Require that automobile and truck access to commercial properties sited adjacent to designated residential parcels be located at the maximum practical distance from the residential parcel.

LU-P-36 Require that industrial uses provide design features, such as screen walls, landscaping and height, setback and lighting restrictions between the boundaries of adjacent residential land use designations so as to reduce impacts on residences due to light, noise, sound and vibration.

PSF/SL-P-1 Achieve consistency between current city standards and county policies for lighting in new development.

PSF/SL-P-4 Require developers to install street lighting in all new developments

in accord with adopted city standards and county policies.

PAR-P-46 Permit major traffic generating activities on community park sites only.

TRAFFIC/CIRCULATION

BUILDOUT OF METROPOLITAN BAKERSFIELD IN ACCORDANCE WITH THE GENERAL PLAN UPDATE COULD RESULT IN AN INCREMENTAL INCREASE IN DEMAND FOR ALTERNATIVE TRANSPORTATION AND ENHANCED USE OF ALTERNATIVE TRANSPORTATION.

Impact Analysis: Over time, as future development occurs and the population and employment of Metropolitan Bakersfield increases, there is expected to be an increase in demand for alternative transportation, including public transit, bikeway facilities, air travel and pedestrian facilities. Transit service is viewed as a supplement to automobile transportation in Metropolitan Bakersfield and is expected to become an increasingly important alternative mode of transportation as the City continues to grow.

Currently, Golden Empire Transit (GET) bus ridership is approximately 23,000 passengers per day. GET operations consist of 65 buses, 18 routes and two transit centers. According to the Metropolitan Bakersfield Transportation Investment Strategy, in 2015, GET operations would consist of 114 buses, 21 routes and several additional transit centers.[4] Bus ridership is projected to increase to approximately 35,000-40,000 per day in 2015.

Generally, the existing bikeway system serves most areas of the City. Additionally, with completion of the Bikeways Master Plan, the bikeway system would further link schools, community civic centers, service areas, parks, employment centers and regional bike paths. The bikeway system would provide an additional access to recreation and open space resources, including the Kern River areas, within Metropolitan Bakersfield.

The two existing airports within Metropolitan Bakersfield, Meadows Field and Bakersfield Municipal Airpark, would continue their current functions under the General Plan Update. Both airports have adopted master plans which call for runway expansion and improvements. In addition, Meadows Field plans to construct a new passenger terminal northwest of its existing location. Furthermore, the airport master plans would be required to maintain conformance with the Kern County Airport Land Use Compatibility Plan.

Pedestrian travel accounts for approximately eighty percent of the total travel in the metro area. Some older neighborhoods lack sidewalks, causing pedestrians to walk in the streets. However, both the city and county require installation of sidewalks in conjunction with future development.

[4] Source: Metropolitan Bakersfield Transportation Investment Strategy, prepared by Barton Aschman Associates. 1997.

It is clear the future development would increase the demand for alternative transportation within Metropolitan Bakersfield. However, with implementation of adopted city and county plans, the supply of alternative transportation sources would grow proportionately with population growth. Additionally, the following goals and policies in the General Plan Update would not only enhance the support for alternative transportation, but would reduce any potentially significant impacts to less than significant levels.

Goals and Policies in the General Plan Update: The Circulation/Transit and Parks Elements contain the following goals and policies:

CIR/ST-G-1 Provide a safe and efficient street system that links all parts of the area for movement of people and goods.

CIR/ST-G-2 Provide for safe and efficient motorized, non-motorized, and pedestrian traffic movement.

CIR/ST-G-7 Develop and maintain a circulation system that supports the land use plan shown in the general plan.

CIR/ST-P-4 Provide additional right-of-way and pavement width at other locations for turn lanes, bus lanes, etc., as needed, based on engineering study.

CIR/ST-P-12 Maintain the integrity of the circulation system.

CIR/ST-P-15 Prohibit trucks from non-truck routes within incorporated areas except as necessary for direct property access for pick-up and delivery.

CIR/ST-P-32 Reserve or acquire right-of-way for all future transportation facilities in conformance with the Circulation Plan Map.

CIR/ST-P-33 Provide new transportation facilities as needed based on existing usage and future demand.

CIR/ST-P-34 Minimize the impacts of land use development on the circulation system. Review all development plans, rezoning applications, and proposed general plan amendments with respect to their impact on the transportation system, and require revisions as necessary.

CIR/ST-P-35 Require new development and expansion of existing development in incorporated areas to fully provide for on-site transportation facilities including streets, curbs, traffic control devices, etc. Within unincorporated areas street improvements will be determined by County Ordinance.

CIR/ST-P-36 Prevent streets and intersections from degrading below Level of

Service “C” where possible due to physical constraints (as defined in a Level of Service standard) or when the existing Level of Service is below “C” prevent where possible further degradation due to new development or expansion of existing development with a three part mitigation program: adjacent right-of-way dedication, access improvements and/or an area-wide impact fee. The area-wide impact fee would be used where the physical changes for mitigation are not possible due to existing development and/or the mitigation measure is part of a larger project, such as freeways, which will be built at a later date.

CIR/ST-P-37 Require new development and expansion of existing development to pay for necessary access improvements, such as street extensions, widenings, turn lanes, signals, etc., as identified in the transportation impact report as may be required for a project.

CIR/ST-P-38 Exempt the downtown Bakersfield redevelopment area and small infill projects from the Level of Service standard to facilitate infill projects and downtown redevelopment and in recognition of the higher traffic levels inherent to a vital central core.

CIR/ST-P-39 Require new development and expansion of existing development to pay or participate in its pro rata share of the costs of expansions in area-wide transportation facilities and services which it necessitates.

CIR/ST-P-41 Plan alignments for local streets to permit economical and practical patterns, shapes, and sizes of development parcels.

CIR/TR-G-1 Provide Planning area residents with a choice of travel modes.

CIR/TR-G-2 Provide a street system and land development policies that support public transportation.

CIR/TR-G-3 Provide cost effective public transportation services.

CIR/TR-G-4 Reduce traffic congestion and parking requirements and improve air quality through improved transportation services.

CIR/TR-G-5 Enhance rail service capacities and usage in the Planning area.

CIR/TR-P-1 Consider transit service issues in the design of the arterial and collector street system.

CIR/TR-P-2 Consider for bus turnouts along arterials and collectors where appropriate.

CIR/TR-P-3 Consider transit service issues in the site plan review process.

CIR/TR-P-4 Coordinate with GET and Kern Transit to locate bus stops as close as possible to the facilities they serve.

CIR/TR-P-5 Work with GET and Kern Transit to provide scheduled public transit to serve metro area residents.

CIR/TR-P-6 Work with the Consolidated Transportation Service Agency (CTSA) to provide social services transportation to metro area residents.

CIR/TR-P-7 Encourage the development of a multi-modal public transportation terminal.

CIR/TR-P-8 Encourage businesses and government to use flexible or staggered work hours so that travel demand is spread more evenly throughout the day.

CIR/TR-P-9 Support efforts to promote ridesharing.

CIR/TR-P-10 Work with AMTRAK to maintain and improve rail passenger service and facilities in Bakersfield.

CIR/TR-P-11 Work to provide grade separations at all arterial/railroad crossings.

CIR/TR-P-12 Support efforts to develop high-speed rail facilities to service the plan area.

CIR/BW-G-1 Provide a circulation system which recognizes and responds to the needs of bicycle travel.

CIR/BW-G-2 Provide a circulation system that minimizes cyclist/motorist conflicts.

CIR/BW-G-3 Provide a continuous easily-accessible bikeway system within the metro area.

CIR/BW-G-4 Provide mechanisms to ensure the prompt implementation of the bikeway system.

CIR/BW-P-1 Require bicycle facilities to be designed in accordance with the State Bikeway Design Criteria.

CIR/BW-P-2 Periodically review, and update if needed, street standards to accommodate bicycle lanes where indicated on the Bikeway Master Plan.

CIR/BW-P-3 Design bridges, over passes, under passes, etc. to be

compatible with bicycle travel.

CIR/BW-P-4 Maintain bicycle facilities so they do not become hazardous.

CIR/BW-P-5 Consider bicycle safety when implementing improvements for automobile traffic operations.

CIR/BW-P-6 Coordinate the Metro Bakersfield Bikeway Master Plan with the regional bicycle system.

CIR/BW-P-7 Provide bicycle parking facilities at activity centers such as shopping centers, employment sites, and public buildings.

CIR/BW-P-8 Provide an information/education program to encourage use of the system and to promote safe riding.

CIR/BW-P-9 Require new subdivisions to provide bike lanes on collector and arterial streets in accordance with the Bikeway Master Plan.

CIR/BW-P-10 Encourage new subdivisions to provide internal bike paths where feasible and where natural features make bike paths desirable.

CIR/BW-P-11 Construct bike lanes in conjunction with all street improvement projects that coincide with the Bikeway Master Plan.

CIR/BW-P-12 Where feasible, stripe and sign existing streets to include bike lanes as shown on the Bikeway Master Plan.

CIR/BW-P-13 Give priority to bikeway construction that will link existing sections of the system.

CIR/P-P-11 Discourage parking between the sidewalk and buildings in pedestrian sensitive areas.

CIR/AP-G-1 Ensure air passenger and general aviation facilities and services are available to meet citizens' needs.

CIR/AP-G-2 Develop, operate, and maintain Meadows Field and Bakersfield Municipal Airpark to meet aviation needs in the metro area.

CIR/AP-P-1 Maintain master plans for Meadows Field and Bakersfield Airpark.

CIR/AP-P-2 Ensure compatibility between the general plan, airport master plans and airport land use plans.

CIR/AP-P-3 Allow for the establishment of private airports and heliports/ helipads.

CIR/AP-P-4 Encourage and provide for the orderly development of public use airports within the Planning area and prevent the creation of new noise and safety impacts.

CIR/PW-G-1 Encourage pedestrian travel as a viable mode of movement throughout the Planning area.

CIR/PW-G-2 Provide adequate sidewalks throughout the Planning area.

CIR/PW-G-3 Retrofit areas lacking wheelchair ramps.

CIR/PW-P-1 Provide sidewalks along streets where pedestrian use warrants.

CIR/PW-P-2 Facilitate the provision of sidewalks on streets where they are lacking.

CIR/PW-P-3 Encourage new subdivisions to provide internal pedestrian paths where feasible and where natural features make paths desirable.

CIR/PW-P-4 Provide for the physically handicapped in the design of all pedestrian facilities.

CIR/PW-P-5 Encourage development of pedestrian sensitive uses and design characteristics in the following areas:

a. Downtown
b. Baker Street
c. Southwest Center
d. Northwest Center
e. Northeast Center

PAR-P-27 Encourage pedestrian and bicycle linkages between residential and commercial uses.

NOISE

DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE GENERAL PLAN UPDATE WOULD INVOLVE CONSTRUCTION-RELATED NOISE.

Impact Analysis: Typical activities associated with construction are a highly noticeable temporary noise source. Noise from construction activities are generated by two primary sources during construction phases: 1) the transport of workers and equipment to construction sites; and 2) the noise related to the construction itself. As currently underutilized or vacant parcels are developed in accordance with the General Plan Update, construction-related activities would generate noise from construction equipment, grading operations, and stationary equipment. These noise sources can be a nuisance to local residents and

businesses. However, construction noise impacts are short-term and cease upon completion of each project. Furthermore, the City of Bakersfield Noise Ordinance regulates the time of day when construction is permitted to occur. The unincorporated portion of the Metropolitan area is not subject to a noise ordinance, although discretionary land use projects may include noise mitigation to conform with the Noise Element. Implementation of the Noise Ordinance would serve to reduce short-term construction noise impacts to less than significant levels.

Goals and Policies in the General Plan Update: The Noise Element contains the following goals and policies:

NOI-G-1 Ensure that residents of the Bakersfield Metropolitan Area are protected from excessive noise and existing moderate levels of noise are maintained.

NOI-G-2 Protect the citizens of the Planning area from the harmful effects of exposure to excessive noise, and protect the economic base of the area by preventing the encroachment of incompatible land uses near known noise-producing roadways, industries, railroads, airports and other sources.

NOI-P-2 Prohibit new noise-sensitive land uses in noise-impacted areas unless effective mitigation measures are incorporated into project design to acceptable levels.

NOI-P-3 Review discretionary industrial, commercial or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will be reviewed if resulting noise levels will exceed the performance standards contained within Table VII-4 in areas containing residential or other noise-sensitive land uses.

NOI-P-4 Require noise level criteria applied to land uses other than residential or other noise-sensitive uses to be consistent with the recommendations of the California Office of Noise Control (see Figure VII-3).

NOI-P-6 Encourage interjurisdictional coordination and cooperation with regard to noise impact issues.

GEOLOGIC AND SEISMIC HAZARDS

BUILDOUT IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY INCREASE THE NUMBER OF PEOPLE/STRUCTURES EXPOSED TO ADVERSE EFFECTS ASSOCIATED WITH RUPTURE OF A KNOWN EARTHQUAKE FAULT.

Impact Analysis: Active or potentially active faults are located within the Plan area. The south end of the San Joaquin Valley is bordered by four major fault systems, all of which are considered to be active: San Andreas, Breckenridge-Kern Canyon, Garlock and White Wolf faults. It is probable that these faults will move in the future. As a result, it is anticipated that buildout of the General Plan Update would expose an increased number of people/structures to potential substantial adverse effects associated with rupture of a known earthquake fault.

Alquist-Priolo Special Studies Zones have been designated for portions of the Plan area to indicate the presence of faults which showed surface breakage during the 1952 White Wolf earthquake. These Zones mark the areas where faults are considered to have been recently active (during the last 10,000 years) and to have a relatively high potential for surface rupture. Alquist-Priolo Special Studies Zone maps are on file with the City of Bakersfield and the County of Kern.

Structures constructed over these active faults would be unable to withstand the direct impact of surface rupture and even small surface cracks can cause severe structural damage to them. In compliance with the Alquist-Priolo Earthquake Fault Zoning Act and in order to reduce the level of significance of this potential impact, any development proposals within Special Studies Zones would be subject to special geologic investigation requirements.

The Safety Element has identified various implementation programs with respect to fault rupture. These programs specify various requirements including: detailed geologic investigations are to be conducted, in conformance with guidelines of the California Division of Mines and Geology, for all construction designed for human occupancy in an Alquist-Priolo Fault Study Zone; construction of buildings for human occupancy within 50 feet of the trace of an active fault is prohibited; plans and permits for installation of major lifeline components such as for highways, utilities and petroleum or chemical pipelines are to incorporate design features to accommodate potential fault movement in areas of active faults without prolonged disruption of an essential service or threat to health and safety; and field information is to be developed as part of any CEQA investigations and geologic reports by the city/county geologists should be kept current and accessible for use in report preparation, geologic reviews and policy development.

It should be noted that active faults may potentially exist outside of the Special Studies Zones. As a result, development of critical and important facilities proposed outside of these zones would require additional fault investigation. The Safety Element has specified a policy which requires that the development of critical facilities be supported by documentation of thorough hazard investigation.

Further, the Safety Element has identified various implementation programs to be carried out by the City and County affecting seismic safety of critical facilities. These programs include: detailed site studies for fault rupture potential are to be conducted as background to the design process for critical facilities under city and county discretionary approval; existing critical facilities are to be reviewed for any

significant siting, design or construction problems that would make them vulnerable in an earthquake. The findings shall be incorporated into emergency operations plans as well as addressed in longer-term programs of facilities upgrading or relocation; and construction of Critical Facilities is prohibited within 300 feet of the trace of an active fault.

Numerous controls would be imposed on development proposals through the permitting process. In general, the development would be regulated (and potential geologic impacts reduced) under the requirements of the California Building Code, the Alquist-Priolo Special Studies Zone Act, City/County land use policies and zoning, and Plan-specific mitigation measures. Future development would be subject to compliance with Title 15 of the Bakersfield Municipal Code, Building and Construction, including but not limited to Chapter 15.12, Uniform Building Code, which states that the Uniform Building Code and the 1998 Edition of the California Building Standards Code are the building code of the City for the purpose of regulating buildings and construction.

Although a relatively high potential for surface rupture exists in certain portions of the Plan area, implementation of the General Plan Update would not result in any impacts related to fault rupture beyond those that may presently exist within the Plan area. Further, the Safety Element identifies seismicity as a key safety issue and contains specific goals, policies, and implementation programs to reduce seismic hazards within the City. Therefore, implementation of the General Plan Update would result in less than significant impacts in this regard.

Goals and Policies in the General Plan Update: The Safety Element contains the following goals and policies:

SAF/SEI-G-6 Provide a continuously improving data base and reference source for evaluation of seismic and geologic hazards.

SAF/SEI-P-10 Prohibit development designed for human occupancy within 50 feet of a known active fault and prohibit any building from being placed astride an active fault.

SAF/SEI-P-11 Require site-specific studies to locate and characterize specific fault traces within an Alquist-Priolo Earthquake Fault Zone for all construction designed for human occupancy.

SAF/SEI-P-12 Design significant lifeline installations such as highways, utilities and petrochemical pipelines which cross an active fault, to accommodate potential fault movement without prolonged disruption of an essential service or creating threat to health and safety.

SAF/SEI-P-15 Compile information on areas of potential hazards and field information developed as part of CEQA investigations and geologic reports and keep geologic reviews and policy

development current and accessible for use in report preparation.

SAF/SEI-P-17 Require known geologic and seismic hazards within the area of a proposed subdivision to be referenced on the final subdivision map.

BUILDOUT IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY EXPOSE A GREATER NUMBER OF PEOPLE OR STRUCTURES TO STRONG SEISMIC GROUND SHAKING DURING A SEISMIC EVENT.

Impact Analysis: Given the highly seismic character of the Plan area, moderate to severe groundshaking associated with earthquakes on the nearby faults can be expected within all of the Plan area. This has the potential to result in substantial damage to some buildings within the Plan area even though the epicenters may be many miles away. Several buildings, especially those constructed prior to the City's first seismic codes, could suffer severe damage or collapse in the event of any earthquake that produces moderate to strong ground motion in the Plan area. Some structures, including tilt-ups, unreinforced masonry buildings, older buildings, buildings over four stories, and mobile homes would be particularly susceptible to earthquake damage.

Senate Bill 547 (enacted in 1986) required local jurisdictions to inventory existing unreinforced masonry buildings and develop structural hazards reduction programs for such buildings by January 1, 1990. In response to this requirement, the City conducted a complete inventory of unreinforced masonry buildings and an aggressive seismic retrofit construction program. This program for unreinforced masonry buildings was proven very successful. Of those buildings identified as “unreinforced masonry structures”, 85 percent are presently up to 1993 seismic construction standards. The County has performed a similar inventory and notified owners of the status of their buildings.

Plan implementation would increase the Plan area's population, thus, exposing a greater number of people to ground shaking hazards. Therefore, impacts associated with seismically induced ground shaking would be considered significant unless mitigated. Specific goals, policies, and implementation measures have been included in the Safety Element to minimize potential seismic hazards in the City. Additionally, it should be noted that as a part of the City’s discretionary review process, detailed site-specific studies regarding ground shaking characteristics (and other geologic hazards) are required for critical facilities, as opposed to all future development. Therefore, mitigation has been specified which requires that the database of geologic hazards be continuously improved by means of site-specific studies conducted for all future development.

Adherence to/compliance with the Safety Element, as well as compliance with the City and County Development Codes and the California Building Code, would reduce impacts associated with ground shaking to a less than significant level. It should be noted that the Uniform Building Code was revised in 1998 to:

- Upgrade the level of ground motion used in the seismic design of buildings;
- Add site amplification factors based on local soils conditions; and
- Improve the way ground motion is applied in detailed design.

Goals and Policies in the General Plan Update: The Safety Element contains the following goals and policies:

SAF/SEI-G-1	Substantially reduce the level of death, injury, property damage, economic and social dislocation and disruption of vital services that would result from earthquake damage.
SAF/SEI-G-2	Ensure the availability and effective response of emergency services following an earthquake.
SAF/SEI-G-3	Prepare the Planning area for effective response to, and rapid, beneficial recovery from, an earthquake.
SAF/SEI-G-4	Prevent loss of life from the failure of critical facilities in an earthquake and ensure the continued functioning of essential facilities following a disaster.
SAF/SEI-G-6	Provide a continuously improving data base and reference source for evaluation of seismic and geologic hazards.
SAF/SEI-P-1	Ensure that earthquake survival and efficient post-disaster functions are a primary objective in the siting, design and construction standards for discretionary essential facilities or for expansion of such existing facilities.
SAF/SEI-P-2	Require that the siting and development of critical facilities under discretionary approval by the City Council and Board of Supervisors be supported by documentation of thorough hazard investigations relating to site selection, pre-construction site investigations and application of the most current professional standards for seismic design.
SAF/SEI-P-3	Encourage existing critical facilities with significant seismic vulnerabilities to be upgraded or relocated as appropriate.
SAF/SEI-P-4	Encourage critical facilities in dam inundation areas to develop and maintain plans for safe shut-down and efficient evacuation from their facilities, as appropriate to the degree of flood hazard for each facility.
SAF/SEI-P-5	Incorporate planning for incidents affecting critical facilities into contingency plans for disaster response and recovery.

SAF/SEI-P-6	Inventory all unreinforced masonry buildings in the Planning area for conformance with state legislation and guidelines (i.e., SB 547, enacted in 1986).
SAF/SEI-P-7	Continue to address seismically hazardous buildings pursuant to Chapter 12.2 (8875 et Seq.), Division 1 of Title 2 of the Government Code.
SAF/SEI-P-8	Require seismic review of other potentially hazardous buildings upon any change in their use or occupancy status.
SAF/SEI-P-9	Adopt and maintain high standards for seismic performance of buildings, through prompt adoption and careful enforcement of the most current seismic standards of the Uniform Building Code.
SAF/SEI-P-15	Compile information on areas of potential hazards and field information developed as part of CEQA investigations and geologic reports and keep geologic reviews and policy development current and accessible for use in report preparation.
SAF/SEI-P-16	Encourage and support local, state and federal research program for delineation of geologic and seismic hazards so that acceptable risk may be continually reevaluated and kept current with state-of-the-art information and contemporary values.
SAF/SEI-P-17	Require known geologic and seismic hazards within the area of a proposed subdivision to be referenced on the final subdivision map.
SAF/SEI-P-22	Require local agencies to coordinate with the business community to reduce seismic hazards.
SAF/SEI-P-23	Increase the public awareness of seismic hazards in residents of the city and county.
SAF/SEI-P-24	Require the city's and county's emergency preparedness programs to have a three-fold emphasis: hazard mitigation, disaster response and self-sufficiency of residents, business and industry.
SAF/SEI-P-25	Require the emergency management program to include effective plans for disaster/earthquake response, training of responsible personnel, mutual aid agreements for all appropriate functions, and exercises conducted at least annually to test and evaluate plan capabilities.

BUILDOUT IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY EXPOSE PEOPLE OR STRUCTURES TO POTENTIAL SUBSTANTIAL ADVERSE EFFECTS ASSOCIATED WITH LIQUEFACTION.

Impact Analysis: The area of high ground water which exists in the southeastern portion of the Plan area (refer to Figure VIII-2 of the 1990 General Plan) may be subject to liquefaction in an earthquake, with attendant ground rupture and potential sinking or tilting of large buildings. According to the General Plan Land Use Map, this area is designated primarily for public and agricultural land uses.

Areas of high groundwater are rare elsewhere in the Plan area and not all soil types are susceptible to liquefaction. However, additional information is necessary to determine the geographic extent of high groundwater. The Safety Element has identified various implementation programs to be carried out by the City and County with respect to potential liquefaction. These programs specify various requirements including detailed site studies which are to be conducted for liquefaction potential as background to the design process for critical facilities under city and county discretionary approval. Liquefaction investigations also are to be conducted in all areas of high groundwater potential. Appropriate foundation designs are to be identified to mitigate potential damage to buildings on sites with liquefaction potential.

Specific goals, policies, and implementation programs have been included in the Safety Element to minimize potential liquefaction hazards in the Planning area. These would serve to mitigate potential liquefaction problems for future uses. With implementation of the goals and policies outlined below, impacts to future uses associated with liquefaction would be reduced to a less than significant level.

Goals and Policies in the General Plan Update: The Safety Element contains the following goals and policies:

SAF/SEI-G-5	Protect essential lifelines and prevent casualties and major social and economic disruption due to liquefaction in an earthquake.
SAF/SEI-G-6	Provide a continuously improving database and reference source for evaluation of seismic and geologic hazards.
SAF/SEI-P-5	Incorporate planning for incidents affecting critical facilities into contingency plans for disaster response and recovery.
SAF/SEI-P-13	Determine the liquefaction potential at sites in areas of high groundwater prior to development and determine specific mitigation to be incorporated into the foundation design, as necessary to prevent or reduce damage from liquefaction in an earthquake.

SAF/SEI-P-14 Route major lifeline installations around potential liquefaction areas or otherwise protect them against significant damage from liquefaction in an earthquake.

BUILDOUT IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY EXPOSE PEOPLE OR STRUCTURES TO POTENTIAL SUBSTANTIAL ADVERSE EFFECTS ASSOCIATED WITH SEISMICALLY INDUCED LANDSLIDES.

Impact Analysis: As previously noted, a strong earthquake could trigger landslides or slope failures on steeper slopes in the foothills and along the Kern River Canyon and floodplain. As illustrated on the General Plan Land Use Map, these areas are designated primarily for agriculture and open space use. Therefore, it is not anticipated that significant development would occur in these areas as a result of Plan implementation and people or structures would not be significantly exposed to substantial adverse effects involving seismically-induced landslides. The Safety Element has identified the goal of providing a continuously improving database and reference source for evaluation of seismic and geologic hazards, which would include areas with the potential for seismically-induced landslides. In addition, the Safety Element has identified implementation-programs with respect to seismically-induced landslides. Implementation programs require that maps be compiled showing the location of all geologic hazards, including earthquake-induced landslides.

Specific goals, policies and implementation programs have been included in the Safety Element to minimize potential landslide hazards in the Planning area. With implementation of the goals and policies outlined below, impacts to future uses associated with landslides would be reduced to a less than significant level.

Goals and Policies in the General Plan Update: The Safety Element contains the following goals and policies:

SAF/SEI-G-6 Provide a continuously improving database and reference source for evaluation of seismic and geologic hazards.

SAF/SEI-P-15 Compile information on areas of potential hazards and field information developed as part of CEQA investigations and geologic reports and keep geologic reviews and policy development current and accessible for use in report preparation.

SAF/SEI-P-16 Encourage and support local, state and federal research program for delineation of geologic and seismic hazards so that acceptable risk may be continually reevaluated and kept current with state-of-the-art information and contemporary values.

SAF/SEI-P-17 Require known geologic and seismic hazards within the area of a proposed subdivision to be referenced on the final subdivision map.

BUILDOUT IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY EXPOSE PEOPLE OR STRUCTURES TO POTENTIAL SUBSTANTIAL ADVERSE EFFECTS ASSOCIATED WITH LANDSLIDES.

Impact Analysis: Slopes subject to failure within the Metropolitan Bakersfield area are predominantly found along the river terraces, bluffs and foothills to the northeast and east of the City. Investigations to date have documented two landslides in the foothills northeast of the City. The approximate locations and directions of movement of these landslides are illustrated in Figure VIII-2 of the 1990 General Plan. It is not anticipated that significant development would occur in these areas as a result of Plan implementation and people or structures would not be significantly exposed to substantial adverse effects involving landslides. Additionally, this impact would be further reduced after compliance with the Safety Element's goal of providing a continuously improving database and reference source for evaluation of seismic and geologic hazards, including areas with the potential for landslides.

Goals and Policies in the General Plan Update: The Safety Element contains the following goals and policies:

SAF/SEI-G-6 Provide a continuously improving database and reference source for evaluation of seismic and geologic hazards.

SAF/SEI-P-15 Compile information on areas of potential hazards and field information developed as part of CEQA investigations and geologic reports and keep geologic reviews and policy development current and accessible for use in report preparation.

SAF/SEI-P-16 Encourage and support local, state and federal research program for delineation of geologic and seismic hazards so that acceptable risk may be continually reevaluated and kept current with state-of-the-art information and contemporary values.

SAF/SEI-P-17 Require known geologic and seismic hazards within the area of a proposed subdivision to be referenced on the final subdivision map.

Mitigation Measures: No mitigation measures beyond the goals, policies and implementation measures identified in the General Plan Update are proposed.

Level of Significance After Policies/Mitigation: Less Than Significant Impact.

BUILDOUT IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY EXPOSE PEOPLE OR STRUCTURES TO A SIGNIFICANT RISK RESULTING FROM A SEISMICALLY-INDUCED FAILURE OF ISABELLA DAM.

Impact Analysis: As illustrated in Figure VIII-2 of the 1990 General Plan, a break in Isabella Dam caused by an earthquake would result in flooding 60 square miles of the Metropolitan Bakersfield area. According to the Land Use Map, a growth in population and additional development resulting from Plan implementation would occur throughout this area. Therefore, an increased number of people and structures would be exposed to this potential risk. This would in turn require the evacuation of a substantial portion of the Plan area. If communications are intact, the City and County may have from two to six hours to complete the evacuation.

The Safety Element has identified policies including a response plan for dam failure as well as the maintenance of disaster response plans, development of discretionary approval procedures for critical facilities, and the review of zoning designations, street widths, and circulation patterns for compatibility with evacuation plans. These policies and review procedures are necessary to mitigate this potential hazard to a less than significant level.

With implementation of the following goals and policies, impacts regarding dam inundation hazards would be reduced to a less than significant level.

Goals and Policies in the General Plan Update: The Safety Element contains the following goal and policies:

SAF/SEI-G-7 Protect land uses from the risk of dam failure inundation including the assurances that: the functional capabilities of essential facilities are available in the event of a flood; hazardous materials[5] are not released; effective measures for mitigation of dam failure inundation are incorporated into the design of critical facilities; and the rapid and orderly evacuation of populations in the inundation area will occur.

SAF/SEI-P-1 Ensure that earthquake survival and efficient post-disaster functions are a primary objective in the siting, design and construction standards for discretionary essential facilities or for expansion of such existing facilities.

SAF/SEI-P-2 Require that the siting and development of critical facilities under discretionary approval by the City Council and Board of Supervisors be supported by documentation of thorough hazard investigations relating to site selection, pre-construction site investigations and application of the most current professional standards for seismic design.

[5] Hazardous materials are defined as injurious substances, including pesticides, herbicides, toxic metals and chemicals, liquefied natural gas, explosives, volatile chemicals, and nuclear fuels.

SAF/SEI-P-3	Encourage existing critical facilities with significant seismic vulnerabilities to be upgraded or relocated as appropriate.
SAF/SEI-P-4	Encourage critical facilities in dam inundation areas to develop and maintain plans for safe shut-down and efficient evacuation from their facilities, as appropriate to the degree of flood hazard for each facility.
SAF/SEI-P-5	Incorporate planning for incidents affecting critical facilities into contingency plans for disaster response and recovery.
SAF/SEI-P-18	Design discretionary critical facilities located within the potential inundation area for dam failure in order to: mitigate the effects of inundation on the facility; promote orderly shut-down and evacuation (as appropriate); and, prevent on-site hazards from affecting building occupants and the surrounding communities in the event of dam failure.
SAF/SEI-P-19	Design discretionary facilities in the potential dam inundation area used for the manufacture, storage or use of hazardous materials to prevent on-site hazards from affecting surrounding communities in the event of inundation.
SAF/SEI-P-20	Require emergency response plans for the Planning area to include specific procedures for the sequential and orderly evacuation of the potential dam inundation area.
SAF/SEI-P-21	Encourage critical and high-occupancy facilities as well as facilities for elderly, handicapped and other special care occupants located in the potential inundation area below the dam to develop and maintain plans for the orderly evacuation of their occupants.

PORTIONS OF THE PLAN AREA ARE LOCATED ON GEOLOGIC UNITS THAT ARE CONSIDERED UNSTABLE AND COULD POTENTIALLY RESULT IN SUBSIDENCE.

Impact Analysis: As previously noted, gradual subsidence (up to four feet in certain areas) has been identified in the southern portion of the Plan area. As illustrated on the General Plan Land Use Map, the southern area is designated primarily for agriculture use. Therefore, it is not anticipated that significant development would occur in these areas as a result of Plan implementation and people or structures would not be significantly exposed to substantial adverse effects involving subsidence. Nonetheless, although subsidence is not a significant hazard, damage to wells, foundations and underground utilities could occur. This potential impact would be considered a less than significant with the site-specific studies conducted as a part of the discretionary review process.

These studies would document the presence/absence of this potential hazard and identify the necessary mitigation.

Goals and Policies in the General Plan Update: The Safety Element contains the following policies:

SAF/SEI-P-15 Compile information on areas of potential hazards and field information developed as part of CEQA investigations and geologic reports and keep geologic reviews and policy development current and accessible for use in report preparation.

SAF/SEI-P-16 Encourage and support local, state and federal research program for delineation of geologic and seismic hazards so that acceptable risk may be continually reevaluated and kept current with state-of-the-art information and contemporary values.

SAF/SEI-P-17 Require known geologic and seismic hazards within the area of a proposed subdivision to be referenced on the final subdivision map.

SOILS AND AGRICULTURAL RESOURCES

IMPLEMENTATION OF THE GENERAL PLAN UPDATE MAY RESULT IN SUBSTANTIAL SOIL EROSION OR THE LOSS OF TOPSOIL.

Impact Analysis: As previously noted, four highly erodible soil types are present in the Planning area. Soil erosion is a continuing long term problem which can occur naturally or can be accelerated through the activities of human beings, such as with agricultural activities. One such example of an agricultural activity which accelerates erosion is soil tillage. This process, which involves cutting loose, granulating, and turning over the soil, greatly reduces the soil's overall resistance to detachment, through destruction of the soil structure and organic matter (particularly live and dead roots which bind the soil particles together. When fertile soil is removed, along with it go the nutrients and organic matter which are significant to the growth of plants and crops. Without this soil, plants and crops will not survive. Thus, it's easy to see that a reduction in this protective cover will only expose more soil to the detrimental effects of wind and water erosion.

The long-term effects of wind and water erosion which occur in the vacant and agriculturally active portions of the Planning area would be inversely related to the area's forecasted growth. More specifically, if the vacant and agriculturally active portions of the Planning area remain in their current condition and are not improved, it is assumed that erosion would continue as under the current conditions. Conversely, the erosion of soils in the Planning area is anticipated to decrease as the development of vacant and agricultural lands increases in response to the residential, commercial, and industrial land uses projected in the

General Plan Update. This is considered a beneficial impact of Project implementation.

Goals and policies have been identified in the General Plan Update which promote soil conservation and which are intended to mitigate the long term effects of wind and water erosion. Additionally, the Conservation Element (Soils and Agriculture) has identified implementation programs with respect to soil erosion. These programs require the periodic review/update of grading ordinances that take into account the potential for soil erosion and that the City and County coordinate with the Soil Conservation Service to provide technical assistance on improving or preserving soil conditions. With implementation of this program and the goals and policies outlined below, impacts with respect to soil erosion would be reduced to a less than significant level.

It should be noted that during the construction phase of future development, short-term wind and water erosion impacts are anticipated to occur. This impact would be considered significant unless mitigated. According to City of Bakersfield Municipal Code Section 16.16.100 and similar provisions in the County's Code of Building Regulations, an Erosion Control Plan would be required, prior to any grading activity, to ensure that erosion controls are implemented. Additionally, the General Plan Update has identified goals and policies intended to prevent soil erosion during and immediately after completion of the construction phase of future developments. Compliance with the General Plan and Municipal Code would reduce impacts in regards to short-term soil erosion to a less than significant level.

Goals and Policies in the General Plan Update: The Conservation Element contains the following goals and policies:

CON/SA-G-2 Promote soil conservation and minimize development of prime agricultural land as defined by the following criteria:

- Capability Class I and/or II irrigated soils,
- 80-100 Storie Index rating,
- Gross crop return of $200 or more per acre per year, and
- Annual carrying capacity of 1 animal unit per acre per year.

CON/SA-G-3 Establish urban development patterns and practices that promote soil conservation and that protect areas of agricultural production of food and fiber crops, and nursery products.

CON/SA-P-6 Continue implementing land grading ordinances that reduce soil erosion/siltation commonly associated with land development.

CON/SA-P-7	Land use patterns, grading, and landscaping practices shall be designed to prevent soil erosion while retaining natural watercourses when possible.
CON/SA-P-8	Encourage agricultural uses to employ soil conservation measures to prevent erosion.
CON/SA-P-11	Encourage property owners to improve or preserve soil conditions.
CON/SA-P-12	Prohibit premature removal of ground cover in advance of development and require measures to prevent soil erosion during and immediately after construction.

PLAN IMPLEMENTATION COULD RESULT IN INCREASED SOIL AND WATER SALINITY.

Salinity issue due to agricultural practices is beyond the scope of the City and County of Kern's authority. Farming and water agencies affect agricultural practices.

LAND DEVELOPMENT ASSOCIATED WITH THE GENERAL PLAN UPDATE COULD BE LOCATED ON EXPANSIVE SOIL CREATING SUBSTANTIAL RISKS TO LIFE OR PROPERTY.

Impact Analysis: The Planning area is not known to be comprised of soils with a high potential for soil expansion. Compliance with the policies of the General Plan Update, the City and County Development Code and the California Building Code would reduce potential site-specific impacts to less than significant levels. Additionally, the potential impact is further reduced through adherence to standard engineering practices and design criteria. Therefore, Plan implementation is not anticipated to create a substantial risk to life or property as a result of development on expansive soils.

Goals and Policies in the General Plan Update: No goals, policies and implementation within the General Plan Update apply to potential impacts resulting from expansive soils.

HYDROLOGY AND DRAINAGE

BUILDOUT OF METROPOLITAN BAKERSFIELD IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY RESULT IN VIOLATION OF WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS.

Impact Analysis: The degree of water quality impacts from discharges associated with the General Plan's forecasted growth is relative not only to the intensity and location of the discharge source (i.e., future development) but also to the volume, quality, and uses of the receiving waters.

Urbanization has the potential to result in a net increase in pollutant export over naturally occurring conditions. The impact of the higher export can be on the adjacent streams and also on the downstream receiving waters. However, it should be noted that an important consideration in evaluating stormwater quality from any future development is to assess whether or not it impairs the beneficial use of the receiving waters. Receiving waters can assimilate a limited quantity of various constituent elements, however, there are thresholds beyond which the measured amount becomes a pollutant and results in an undesirable impact. A summary of the typical impacts to water quality from urbanization is discussed below.

Storm Water Runoff. Impacts of storm water contaminants on surface and groundwaters are an important concern. Storm water runoff from residential and industrial areas can contribute to water quality degradation since it contains organics, pesticides, oil, grease, and heavy metals. Because these pollutants accumulate during the dry summer months, the first major storm after summer can flush a highly concentrated load to receiving waters and catch basins. Combined storm and sanitary systems may result in some runoff to wastewater treatment plants. In other cases, storm water collection wells can produce direct discharges to groundwater.

Erosion. Erosion is one of the greatest problems in the watershed area. Erosion is a natural occurrence, however, most activities of man accelerate the process. Erosion causes discoloration of streams, and the suspended matter settles to form a smothering blanket on the streambed. Erosion is accelerated by poor drainage and soil stabilization associated with the following activities: road building, clearing land, leveling land, construction, brush clearing, off-road vehicle use, agriculture, overgrazing, and fires.

It should be noted that there are various activities that presently occur throughout the Planning area which are anticipated to continue, although to a lesser extent, with buildout of the proposed General Plan Update. The following is a summary of the anticipated water quality impacts associated with continuation of the existing activities:

Agriculture. Agricultural drainage which is the excess water not used by crops runs off or percolates. This drainage, depending on management and location, carries varying amounts of salts, nutrients, pesticides, trace elements, sediments, and other by-products to surface and groundwaters. Most critical, is the problem of the salts brought in with irrigation water and leached out of soils. Evaporation and crop transpiration remove water from soils, which can result in an accumulation of salts in the root zone of the soils at levels that retard or inhibit plant growth. Additional amounts of water often are applied to leach the salts below the root zone. The leached salts eventually enter ground or surface water. Evaporation basins are sometimes used to concentrate drainage water and contain salts. However, evaporation basins have varying potentials to impact wildlife due to salinity.

Confined Animal Operations. Where not controlled, surface runoff from confined animal (dairy and poultry) operations can impair both surface and groundwater beneficial uses. Uncontrolled runoff can also cause nuisance conditions. Animal wastes may produce significant bacteria, organic, nitrate, and other contamination. The greatest potential for water quality problems has historically stemmed from the overloading of the facilities' waste containment and treatment ponds during the rainy season and inappropriate application of wastewater and manure. Overloading sometimes results in discharge of manure waste to canals and drainageways. Most animal confinement facilities have designated some land for wastewater and spreading manure. However, the lands assimilative capacity is dependant upon area, crop, crop yield, soil, and season of the year. When land and capacity is exceeded, the excessive salts and nutrients are leached to the underlying groundwater.

Unconfined Animals. Grazing animals can contribute bacteria and pathogens to surface waters. However, the greatest potential problem is erosion resulting from overgrazing (refer to *Erosion* discussion above). Grazing impacts are generally considered nonpoint source of pollution.

Overdraft. The elimination of overdraft is an important step in managing the rate of salinity increase in the groundwater. Continued overdraft would deplete good quality water supplies and introduce salts from poorer quality aquifers.

Salinity. Some of the salt load to groundwater resources is primarily the result of natural processes within the Basin. This includes salt loads leached from the soils by precipitation, valley floor runoff, and native surface waters. Salts that are not indigenous to the Basin water resources are a product of man's activities. Salts come from imported water, soil leached by irrigation, animal wastes, fertilizers and other soil amendments, municipal use, industrial wastewaters, and oil field wastewaters. These salt sources, all contributors to salinity increases, should be managed to the extent practicable to reduce the rate of groundwater degradation.

Degradation of groundwater in the Basin by salts is unavoidable without a plan for removing salts from the Basin. A valleywide drain to carry salts out of the valley is considered the best technical solution to the water quality problems of the Tulare Lake Basin.[6] The drain would carry wastewater generated by municipal, industrial, and agricultural activities, high in salt and unfit for reuse.

Mineral Exploration and Extraction. Drainage and runoff from mines and various operations associated with mining can result in serious impacts to ground and surface water beneficial uses, if not properly managed. Sedimentation caused by mining is addressed by discharge requirements for existing mines, however, the Regional Water Board does not have a specific program for controlling erosion from abandoned mines.

As discussed above, surface runoff and erosion associated with the General

[6] Ibid., Page I-2.

Plan's forecasted growth has the potential to contribute to water quality degradation. Further, the continuation of certain activities also has the potential to degrade the quality of water. Overall, Plan implementation has the potential to result in the addition of a variety of pollutants which would be considered a significant impact unless mitigated. However, future development's compliance with the legal/regulatory requirements, including but not limited to the NPDES Permit Program, would reduce this impact to a less than significant level. Further, the Conservation Element in the General Plan Update has identified the goal of "continuing to identify cooperative planning and implementation of programs and projects, which will resolve water resource deficiencies and water quality problems." In addition, the Conservation Element (Water Resources) includes implementation programs which require the maintenance of industrial waste discharge regulation and monitoring programs which protect the planning area groundwater from contaminants. The implementation program also includes support for water conservation measures and programs of benefit. The goals and policies included in the Conservation/Water Resources Element, and specified implementation programs would help to maintain water quality in the Planning area as it approaches buildout. Therefore, less than significant water quality impacts are anticipated to occur with implementation of the General Plan Update.

Goals and Policies in the General Plan Update: The Conservation Element contains the following goals and policies:

CONS/WR-G-4	Continue cooperative planning for and implementation of programs and projects which will resolve water resource deficiencies and water quality problems.
CON/WR-P-6	Protect Planning area groundwater resources from further quality degradation.
CON/WR-P-7	Provide substitute or supplemental water resources to areas already impacted by groundwater quality degradation by supporting facilities construction for surface water diversions.
CON/SA-P-7	Land use patterns, grading, and landscaping practices shall be designed to prevent soil erosion while retaining natural watercourses when possible.
CON/SA-P-13	Minimize the alteration of natural drainage and require development plans to include necessary construction to stabilize runoff and silt deposition through enforcement of grading and flood protection ordinances.

BUILDOUT OF THE CITY OF BAKERSFIELD AND UNINCORPORATED AREAS IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY CONTRIBUTE TO THE DEPLETION OF GROUNDWATER SUPPLIES OR MAY INTERFERE WITH GROUNDWATER RECHARGE.

Impact Analysis: Water demands are generally projected as a function of population increases. As described in Section 3.0, *Project Description*, of the Final EIR, the Planning area's population is projected to increase to 458,000 persons by the year 2010, an approximately 14 percent increase over the area's year 2001 population of 402,100 persons. Thus, it is assumed that the projected water demand would increase proportionate to the projected population growth. Based on average annual water supply, it is anticipated that the future water supply would be able to meet the Planning area's future water demand without resulting in a substantial depletion of groundwater supplies or substantial interference with groundwater recharge.

The physical supply of water to residents and businesses within Metropolitan Bakersfield is provided by a series of water districts and private water supply companies. The Kern County Water Agency Improvement District No. 4 (I.D.-4) sells water at wholesale prices to various water purveyors within greater Metropolitan Bakersfield. The primary water purveyors consist of the City of Bakersfield domestic water system known as Ashe, Fairhaven, and Riverlakes Domestic Water Systems, the California Water Service Company (CWSC), Vaughn Water Company (VWC), Oildale Mutual Water Company (OMWC), North of the River Municipal Water District (NORMWD) and the East Niles Community Service District (ENCSD).

The City of Bakersfield purchased both the Kern River water rights and the physical water distribution systems for the Ashe Service Area from Tenneco West in 1977. The City also subsequently added service areas in the Fairhaven and Riverlakes areas. These are the only portions of the City that receives water service from the City of Bakersfield. Water supply to the system is pumped from 47 groundwater wells. Additional wells are continually in development. The California Water Service Company operates the City's water system under contract from the City of Bakersfield. Also, the CWSC supplies groundwater through 187 wells in combination with surface water.

According to the 2000 Bakersfield Water Balance Report, the year 2020 projected water demand for the City of Bakersfield would be less than the average annual water supply that has been available over the past 20 years. However, based on dry year conditions, the projected water demand would be greater than the imported water supply.[7] This dry year condition has the potential to result in an increase in groundwater mining to meet the additional water supply demands of the projected population growth. As previously noted, increased groundwater extraction can eventually exceed the recharge capacity of the aquifers resulting in "overdraft". In their planning, the City has identified certain measures which may be implemented to address possible prolonged drought conditions which may occur in the future. These may include water usage restrictions, distribution of water conservation devices and stringent price controls. However, the primary element of the City's "drought management" plan is it's "banked" groundwater. Because the undergroundwater supply has been "banked", the underground reservoir can be pumped during future dry years without causing a groundwater

[7] Bakersfield 2000 Water Balance Report, Page 14.

overdraft problem. Further, data indicates that the current banked groundwater is over three times greater than the collective shortfall which occurred between 1990 and 1992.[8] Also, the undergroundwater supply can continue to be built up during future wet years.

The Vaughn Water Company obtains all of its water from wells. The VWC owns and operates 11 wells. Approximately 11,000 acre-feet of groundwater are extracted per year by VWC. VWC overlies the Kern River Fan and has excellent water supplies due to ground water recharge programs operated by several entities, including the City of Bakersfield and I.D.-4. Wells and other water facilities are created on an as-needed basis. The VWC has indicated that it would have adequate groundwater supplies available to serve the Planning area at buildout of the General Plan.[9]

The Oildale Mutual Water Company, over the past 25 years, has pumped an average of 250 acre-feet of groundwater per year. As a result of receiving treated water, groundwater has been minimized and used for a backup supply and peaking supply. Hydrogeologic analysis of the Oildale groundwater sub-basin indicates that subsurface outflows currently exist even and would continue to exist even with increased groundwater pumping to over 8,500 acre-feet per year.[10] This would support the reliance of groundwater as a supplemental water supply source for backup, as well as future demands. Thus, groundwater quantities would be available and sufficient to meet future demands associated with buildout of the General Plan.

The North of the River Municipal Water District obtains the majority of its water from the Henry Garnett Water Treatment Plant operated by the Kern County Water Agency. The remainder of the District's water supplies comes from a well. Depending on climatic conditions, the amount of water obtained by the NORMWD over the past several years has ranged from 8500 to 9700 acre-feet per year. The NORMWD has indicated that new or expanded facilities would likely need to be constructed to meet future needs associated with buildout of the General Plan.[11]

The East Niles Community Service District currently utilizes six well to obtain water, in addition to water purchased from I.D.-4 and water obtained from the Diatomaceous Earth Treatment Plant. In 2000, ENCSD extracted 1,202 million gallons of water via the six wells. In order to meet future demand associated with buildout of the General Plan, the ENCSD would need to increase water supplies, possibly by constructing new wells.[12]

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[8] Ibid., Page 15.

[9] Written correspondence from Michael L. Huhn, General Manager, of the Vaughn Water Company. October 9, 2001.

[10] Written correspondence from Douglas R. Nennely, General Manager, of the Oildale Mutual Water Company. November 15, 2001.

[11] Written correspondence from the North of the River Municipal Water District. November 12, 2001.

[12] Written correspondence from Kelly K. Ulrich, General Manager, of the East Niles Community Service District. October 4, 2001.

With continuation of on-going recharge efforts, as well as continued compliance with the Drought Management Plans and the goals and policies outlined below, it is not anticipated that buildout of the General Plan Update would result in a significant impact with respect to groundwater supplies or groundwater recharge.

Additionally, it should be noted that the net increase in future water demand caused by population growth is expected to be decreased as a result of the conversion of agricultural lands to urban uses. More specifically, future municipal water consumption associated with the expansion of urban development pursuant to the proposed Land Use Element would be offset by reduction of water consumption associated with the conversion of farmland. Further, it should be noted that overall water use tends to decrease over time as increased emphasis is placed on both conservation and recycling.[13]

Goals and Policies in the General Plan Update: The Conservation Element contains the following goals and policies:

CONS/WR-G-1	Conserve and augment the available water resources of the planning area.
CONS/WR-G-2	Assure that adequate groundwater resources remain available to the planning area.
CONS/WR-G-4	Continue cooperative planning for and implementation of programs and projects which will resolve water resource deficiencies and water quality problems.
CONS/WR-G-5	Achieve a continuing balance between competing demands for water resource usage.
CONS/WR-G-6	Maintain effective cooperative planning programs for water resource conservation and utilization in the planning area by involving all responsible water agencies in the planning process.
CON/WR-P-1	Develop and maintain facilities for groundwater recharge in the Planning area.
CON/WR-P-2	Minimize the loss of water which could otherwise be utilized for groundwater recharge purposes and benefit Planning area groundwater aquifers from diversion to locations outside the area.
CON/WR-P-3	Support programs to convey water from other than San Joaquin Valley basin sources to the Planning area.

[13] Ibid., Page 14.

CON/WR-P-4 Support programs and policies which assure continuance or augmentation of Kern River surface water supplies.

CON/WR-P-5 Work towards resolving the problem of groundwater resource deficiencies in the upland portions of the Planning area.

CON/WR-P-6 Protect Planning area groundwater resources from further quality degradation.

CON/WR-P-7 Provide substitute or supplemental water resources to areas already impacted by groundwater quality degradation by supporting facilities construction for surface water diversions.

CON/WR-P-8 Consider each proposal for water resource usage within the context of total Planning area needs and priorities--major incremental water transport, groundwater recharge, flood control, recreational needs, riparian habitat preservation and conservation.

CON/WR-P-9 Encourage and implement water conservation measures and programs.

BUILDOUT OF THE METROPOLITAN BAKERSFIELD AREA IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY RESULT IN IMPACTS TO DRAINAGE PATTERNS WHICH WOULD RESULT IN EROSION, SILTATION, OR FLOODING.

Impact Analysis: Implementation of the General Plan Update would modify the hydrologic characteristics of the watershed by increasing the amount of impervious area, modifying drainage patterns, increasing the hydraulic efficiency of the drainage conveyance system and natural drainage courses to improved underground storm drain systems, reducing the time to peak flow and increasing the peak discharge.

The General Plan Update has two goals regarding storm drainage; ensure the provision of adequate storm drainage facilities to protect Planning area residents from flooding resulting from storm water excess, and maintain a comprehensive storm drainage system which serves all urban development within the Planning area. The proposed policies are to undertake drainage programs which would serve all currently developed portions of the Planning area that are not now served by adequate storm drainage systems; and to pursue individual drainage plans where they are most needed.

Pursuant to Kern County requirements, new development would be required to provide for their own on-site retention or show that existing facilities have sufficient capacity to carry the additional runoff. Also, the City would accept on-site runoff from future development into its system as long as adequate downstream facilities are in place. In the absence of adequate downstream facilities, the City would

require new development to provide for their own on-site retention and would strategically locate sumps so that they can be incorporated into future development.

Overall, buildout pursuant to the General Plan Update would have a significant impact on storm drainage unless mitigated. Impacts on storm drainage would occur as a result of grading and development of future projects, the addition of impervious surfaces (i.e., roadways, parking lots, and hardscape), and the introduction of landscaping irrigation associated with future development. However, after compliance with legal/regulatory requirements and the following goals/policies, drainage impacts would be reduced to a less than significant level.

Goals and Policies in the General Plan Update: The Public Services and Facilities Element contains the following goals and policies:

PSF/SD-G-1	Ensure the provision of adequate storm drainage facilities to protect Planning area residents from flooding resulting from storm water excess.
PSF/SD-G-2	Maintain a comprehensive storm drainage system which serves all urban development within the Planning area.
PSF/SD-P-1	Develop drainage programs which will serve all currently developed portions of the Planning area that are not now served by adequate storm drainage systems.
PSF/SD-P-2	The city and county should pursue individual drainage plans where they are most needed.
PSF/SD-P-3	Investigate the preparation of a Master Drainage Plan based on the proposed growth in the Planning area.
CON/SA-P-6	Continue implementing land grading ordinances that reduce soil erosion/siltation commonly associated with land development.
CON/SA-P-7	Land use patterns, grading, and landscaping practices shall be designed to prevent soil erosion while retaining natural watercourses when possible.
CON/SA-P-8	Encourage agricultural uses to employ soil conservation measures to prevent erosion.
CON/SA-P-12	Prohibit premature removal of ground cover in advance of development and require measures to prevent soil erosion during and immediately after construction.
CON/SA-P-13	Minimize the alteration of natural drainage and require

development plans to include necessary construction to stabilize runoff and silt deposition through enforcement of grading and flood protection ordinances.

IMPLEMENTATION OF THE GENERAL PLAN UPDATE MAY EXPOSE PEOPLE OR STRUCTURES TO A SIGNIFICANT RISK RESULTING FROM FAILURE OF ISABELLA DAM.

Impact Analysis: Seismically-induced failure of Isabella Dam is addressed in Section 4.6, *Geologic and Seismic Hazards*, of the Final EIR. However, it should be noted that the Dam could fail as a result of some other unforeseen event. As illustrated in Figure VIII-2 of the 1990 General Plan, failure of Isabella Dam would result in flooding 60 square miles of the Metropolitan Bakersfield area. According to the Land Use Map, a growth in population and additional development resulting from Project implementation would occur throughout this area. Therefore, an increased number of people and structures would be exposed to this potential risk. This would in turn require the evacuation of a substantial portion of the Planning area. If communications are intact, the City may have from two to six hours to complete the evacuation.

With implementation of the goals, policies and mitigation measures outlined in Section 4.6, *Geologic and Seismic Hazards*, of the Final EIR, and incorporation of the respective evacuation plans for the sequential and orderly evacuation of the potential dam inundation area, impacts regarding dam inundation hazards due to unforeseen events would be reduced to a less than significant level.

Goals and Policies in the General Plan Update: The Safety Element contains the following goal and policies:

SAF/SEI-G-7 Protect land uses from the risk of dam failure inundation including the assurances that: the functional capabilities of essential facilities are available in the event of a flood; hazardous materials[14] are not released; effective measures for mitigation of dam failure inundation are incorporated into the design of critical facilities; and the rapid and orderly evacuation of populations in the inundation area will occur.

SAF/SEI-P-1 Ensure that earthquake survival and efficient post-disaster functions are a primary objective in the siting, design and construction standards for discretionary essential facilities or for expansion of such existing facilities.

SAF/SEI-P-2 Require that the siting and development of critical facilities under discretionary approval by the City Council and Board of Supervisors be supported by documentation of thorough hazard investigations relating to site selection,

[14] Hazardous materials are defined as injurious substances, including pesticides, herbicides, toxic metals and chemicals, liquefied natural gas, explosives, volatile chemicals, and nuclear fuels.

pre-construction site investigations and application of the most current professional standards for seismic design.

SAF/SEI-P-3 Encourage existing critical facilities with significant seismic vulnerabilities to be upgraded or relocated as appropriate.

SAF/SEI-P-4 Encourage critical facilities in dam inundation areas to develop and maintain plans for safe shut-down and efficient evacuation from their facilities, as appropriate to the degree of flood hazard for each facility.

SAF/SEI-P-5 Incorporate planning for incidents affecting critical facilities into contingency plans for disaster response and recovery.

SAF/SEI-P-18 Design discretionary critical facilities located within the potential inundation area for dam failure in order to: mitigate the effects of inundation on the facility; promote orderly shut-down and evacuation (as appropriate); and, prevent on-site hazards from affecting building occupants and the surrounding communities in the event of dam failure.

SAF/SEI-P-19 Design discretionary facilities in the potential dam inundation area used for the manufacture, storage or use of hazardous materials to prevent on-site hazards from affecting surrounding communities in the event of inundation.

SAF/SEI-P-20 Require emergency response plans for the Planning area to include specific procedures for the sequential and orderly evacuation of the potential dam inundation area.

SAF/SEI-P-21 Encourage critical and high-occupancy facilities as well as facilities for elderly, handicapped and other special care occupants located in the potential inundation area below the dam to develop and maintain plans for the orderly evacuation of their occupants.

BIOLOGICAL RESOURCES

IMPLEMENTATION OF THE GENERAL PLAN UPDATE MAY RESULT IN IMPACTS TO SPECIES IDENTIFIED AS A CANDIDATE, SENSITIVE, OR SPECIAL STATUS SPECIES, AS WELL AS RIPARIAN, WETLAND OR OTHER SENSITIVE NATURAL COMMUNITIES.

Impact Analysis: The area designated for urban uses in the General Plan Update encompasses approximately 75 square miles (47,600 acres) of undeveloped or open land. Of this, approximately 23 square miles (14,200) is natural land which supports populations of the species of concern, and approximately 52 square

miles (33,400 acres) of other open lands, primarily intensive agriculture.[15] The rate of expansion would vary with economic conditions and the actual impact would depend on whether the growth occupies areas which are predominantly in intensive agriculture or areas predominantly natural (native plant communities and grazing lands). Nonetheless, according to the MBHCP, "one-third of urban growth would occur on natural lands". Thus, a primary impact of growth in the Planning area is the loss of natural lands.

Implementation of the General Plan Update would extend urban development into locations where sensitive plant and animal species are known and/or expected to occur. This may result in the loss of habitat and individuals of species that are classified as Threatened or Endangered. Species of Special Concern, as defined by the U.S. Fish and Wildlife Service and/or by the California Department of Fish and Game with documented occurrences within the Planning area, are as follows[16]:

- San Joaquin Kit fox (State Threatened and Federal Endangered)
- Blunt-nosed leopard lizard (State Endangered and Federal Threatened)
- Tipton kangaroo rat (State and Federal Endangered)
- Giant kangaroo rat (State and Federal Endangered)
- San Joaquin antelope squirrel (State Threatened)
- Bakersfield cactus (State and Federal Endangered)
- San Joaquin wooly-threads (Federal Endangered)
- Hoovers wooly-star (Federal Threatened)
- Striped adobe lily (State Threatened)

Studies conducted or reviewed in conjunction with the development of MBHCP did not confirm the presence of those species within the Planning area.

These species are Federal or State-listed as threatened or endangered. Both Federal and State laws protect threatened and endangered species. Two laws that apply to endangered species are the Federal Endangered Species Act (FESA) of 1973, as amended, and the California Endangered Species Act (CESA). FESA prohibits acts of disturbance, which result in the "take" of threatened or endangered species. CESA also prohibits the taking of any endangered, threatened or rare plant and/or animal species in the state. "Take is defined as the killing, harming, or harassment of a listed species that is incidental to, but not the primary purpose of an otherwise lawful activity. "Harm" is further defined to include the killing or harming of wildlife due to significant obstruction of essential behavior patterns (i.e., breeding, feeding, or sheltering) through significant habitat modification or degradation. The loss of the aforementioned species would be a potentially significant impact due to their status as threatened or endangered as listed by the U.S. Fish and Wildlife Service and/or by the California Department of Fish and Game (CDFG).

[15] Metropolitan Bakersfield Habitat Conservation Plan, August 1994, Page vii.

[16] California Natural Diversity Databases. State and Federally Listed Endangered, Threatened and Rare Plants of California and State and Federally Listed Endangered and Threatened Animal of California. July 2001.

California Species of Special Concern are species that have no special legal status; thus there are no provisions for protection, such as are provided for threatened and endangered species listed by the FESA and CESA. However, these species are taxa whose breeding population in California have declined severely or are otherwise so low that extinction may occur. CDFG recommends that these species be given special consideration whenever possible such that the costs of future recovery efforts may be prevented or reduced. California Species of Special Concern that may occur in the Planning area are as follows:

- Short-nosed kangaroo rat
- San Joaquin pocket mouse
- Bakersfield saltbush, recurved larkspur
- Slough thistle

Studies conducted or reviewed in conjunction with the development of the MBHCP confirmed only the presence of the recurved larkspur within the Planning area. The loss of the aforementioned species would be a potentially significant impact due to their status as Species of Special Concern as listed by the U.S. Fish and Wildlife Service and/or by the California Department of Fish and Game.

Buildout in accordance with the General Plan Update, when considering urban and public facilities designated land uses, would primarily affect the San Joaquin kit fox and the Bakersfield cactus. Land currently supporting kit fox and Bakersfield cactus may be converted to urban development. In addition, there would be a potential loss of habitat supporting the Hoover's wooly-star and the Tipton kangaroo rat. The habitat loss would be reduced to the degree to which the lands can be acquired for preserves. The classification of areas containing Bakersfield cactus, as protected or excluded under the HCP, reduces loss of cactus habitat.

Previous study data did not indicate the presence of the blunt-nosed leopard lizard, California jewelflower, San Joaquin wooly-thread, recurved larkspur giant kangaroo rat, or the San Joaquin antelope squirrel in areas subject to future urban development. However, since the studies were not exhaustive enough to confirm total absence there is potential for some of these lands to support the species. Thus, future urban development could result in the take of these species as well.

Many of the Planning area's sensitive plants are located in the rural northeast, but at least a portion of several plant ranges could be affected by urban development permitted under the General Plan Update. Bakersfield Cactus could be displaced by low-density residential uses southwest of the Kern Canyon Road/Highway 178 intersection, by resource-mineral petroleum and residential development in the vicinity of the Alfred Harrell Highway. A large area of Bakersfield Cactus habitat north of the Meadows Field Airport is designated for resource-mineral petroleum and agricultural uses.

Species which inhabit the Southwest and Northeast Focus Areas, would be impacted by implementation of the General Plan Update. However, these species are explicitly addressed in the MBHCP. In 1994, the City and County received

permits under Section 10(a)(1)(B) of the United States Endangered Species Act and Section 2081 of the California Endangered Species Act for incidental take of protected species in connection with development projects.

Existing conflicts between species of concern and urban development have prompted the City and the County to pursue a Habitat Conservation Plan and incidental take permits: a permit under Section 10(a) (1)(B) hereafter referred to as 10(a) Permit of the United States Endangered Species Act and a permit under Section 2081 of the California Endangered Species Act. The MBHCP is designed to offset impacts resulting from loss of habitat incurred through the authorization of an otherwise lawful activity. The goal of the MBHCP is to acquire, preserve and enhance native habitats which support endangered and sensitive species, while allowing urban development to proceed as set forth in the General Plan Update.

MBHCP and implementing agreements and ordinances provide a method of collecting funds for the acquisition and enhancement of habitat land for purposes of creating preserves. Development projects within the Metropolitan area pay mitigation fees which are used to buy habitat lands. These lands are managed by wildlife agencies or entities they approve. Take avoidance measures are also listed in the MBHCP. Additionally, the amount of habitat preserved must always be ahead of what is being developed. Impacts to the aforementioned habitat would be mitigated on a project-by-project basis and in accordance with the Metro's HCP program; therefore, reducing impacts to a less than significant level.

It should be noted that the provision of relatively large areas of land as habitat preserves as envisioned in the MBHCP is expected to provide habitat for additional species whose "taking" is not subject to requirements as stringent as those applied to Federally threatened species. Thus, the MBHCP would have a positive effect on the survival of other species in addition to Federally threatened species.

Goals and Policies in the General Plan Update: The Conservation/Biological Resources, Land Use, Open Space and Parks Elements contains the following goals and policies:

CON/BR-G-1 Conserve and enhance Bakersfield's biological resources in a manner which facilitates orderly development and reflects the sensitivities and constraints of these resources.

CON/BR-G-2 To conserve and enhance habitat areas for designated "sensitive" animal and plant species.

CON/BR-P-1 Direct development away from "sensitive biological resource" areas, unless effective mitigation measures can be implemented.

CON/BR-P-2 Preserve areas of riparian vegetation and wildlife habitat within floodways along rivers and streams, in accordance with

the Kern River Plan Element and channel maintenance programs designed to maintain flood flow discharge capacity.

CON/BR-P-3 Discourage, where appropriate, the use of off-road vehicles to protect designated sensitive biological and natural resources.

CON/BR-P-4 Determine the feasibility of enhancing sensitive biological habitat and establishing additional wildlife habitat in the study area with State and/or Federal assistance.

CON/BR-P-5 Determine the locations and extent of suitable habitat areas required for the effective conservation management of designated “sensitive” plant and animal species.

CON/BR-P-6 Investigate the feasibility of including natural areas selected for the habitat conservation plan as a component of the regional park system.

LU-P-47 Allow for the development of a low density “village-like” center in the Northeast as a focal point of activity which includes retail commercial, professional offices, moderate and high density residential, and filtering outwards to lower densities, according to the following principles:

a) Attempt to focus on open space amenities;

b) Cluster development to take advantage of views;

c) Encourage development to preserve public views of foothill topography and sensitive habitats;

d) Provide the opportunity for the development of residential units above ground floor commercial;

f) Promote pedestrian activity and use of greenbelt links between land uses.

CON/WR-P-8 Consider each proposal for water resource usage within the context of total Planning area needs and priorities--major incremental water transport, groundwater recharge, flood control, recreational needs, riparian habitat preservation and conservation.

OS-P-20 Where possible, and with the cooperation of wildlife agencies, utilize Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) resources to expand/create habitat preserves with the NBOSA.

PAR-P-8 Require the following minimum site size standards in planning and acquiring of local parks and playgrounds:

Mini parks (public) -2.5 usable acres
Neighborhood parks/playgrounds - 10.0 usable acres
Community park/playfield - 20.0 usable acres

These acreages are intended as guides for City and County improvements. Variations may be allowed based on constraints such as land availability, natural obstacles, financing, funding and maintenance costs. The above acreage figures apply to usable acreage. Usable means an area that people can use, with an emphasis on active and group use. It is essentially flat land that can be developed for facilities and activity areas. It is not land steeper than 4 feet horizontal and 1 foot vertical in slope, land with unusually poor soil conditions, land subject to flood water stagnation, land with riparian or otherwise unique habitat worthy of preservation or water bodies or areas impacted adversely by adjacent or nearby land uses.

IMPLEMENTATION OF THE METROPOLITAN BAKERSFIELD GENERAL PLAN UPDATE COULD INTERFERE WITH THE MOVEMENT OF WILDLIFE SPECIES OR WITH MIGRATORY WILDLIFE CORRIDORS.

Impact Analysis: Major areas of remaining natural lands are found in the Kern River Corridor and in the southwest portion of the Planning area. Some of the Kern River corridor is subject to development under the Kern River Parkway Plan. However, of the 1,400 acres comprising the parkway Plan area, about two-thirds are reserved for natural open space which will act as a dispersal corridor for kit fox.[17] Protection of the Kern River as a dispersal corridor is an important part of any preserve system. For this reason, the Section 10(a) permit will not allow City or County to permit incidental take in the primary floodplain of the Kern River. Although the river corridor floods occasionally, it is generally available for long range dispersal and can be effective in maintaining genetic exchange and in allowing natural recolonization of smaller habitat areas. Project implementation is not anticipated to significantly impact or interfere with the movement of Kit Fox.

Goals and Policies in the General Plan Update: The Conservation/Biological Resources Element, Land Use Element and the Open Space Element contain the following goals and policies:

LU-G-6 Accommodate new development that is sensitive to the natural environment, and accounts for environmental hazards.

LU-P-47 Allow for the development of a low density “village-like” center

[17] Metropolitan Bakersfield Habitat Conservation Plan and Final EIR, August 1994, Page 69.

in the Northeast as a focal point of activity which includes retail commercial, professional offices, moderate and high density residential, and filtering outwards to lower densities, according to the following principles:

a) Attempt to focus on open space amenities;

b) Cluster development to take advantage of views;

c) Encourage development to preserve public views of foothill topography and sensitive habitats;

d) Provide the opportunity for the development of residential units above ground floor commercial;

g) Promote pedestrian activity and use of greenbelt links between land uses.

CON/BR-P-1 Direct development away from “sensitive biological resource” areas, unless effective mitigation measures can be implemented.

CON/BR-P-2 Preserve areas of riparian vegetation and wildlife habitat within floodways along rivers and streams, in accordance with the Kern River Plan Element and channel maintenance programs designed to maintain flood flow discharge capacity.

CON/BR-P-3 Discourage, where appropriate, the use of off-road vehicles to protect designated sensitive biological and natural resources.

CON/BR-P-4 Determine the feasibility of enhancing sensitive biological habitat and establishing additional wildlife habitat in the study area with State and/or Federal assistance.

CON/BR-P-6 Investigate the feasibility of including natural areas selected for the habitat conservation plan as a component of the regional park system.

OS-P-20 Where possible, and with the cooperation of wildlife agencies, utilize Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) resources to expand/create habitat preserves with the NBOSA.

IMPLEMENTATION OF THE GENERAL PLAN UPDATE COULD CONFLICT WITH A POLICY/ORDINANCE (I.E., THE METROPOLITAN BAKERSFIELD HABITAT CONSERVATION PLAN) PROTECTING BIOLOGICAL

RESOURCES.

Impact Analysis: According to the Conservation/Biological Resources Element of the General Plan, the City of Bakersfield and County of Kern determined that the appropriate approach to conservation of protected biological resources in the Metropolitan Bakersfield area is through the habitat conservation planning process (i.e., the MBHCP). In 1994, the City and County received permits under Section 10(a)(1)(B) of the United States Endangered Species Act for incidental take of protected species in connection with development projects. "To conserve and enhance habitat areas for designated sensitive animal and plant species" is an established goal of the Conservation/Biological Resources Element. Through the ongoing discretionary review process, the City preserves habitat and avoids take of protected species in compliance with the MBHCP. The General Plan Update would not be in conflict with the MBHCP.

Goals and Policies in the General Plan Update: The Conservation and Open Space Elements contain the following policies:

CON/BR-P-6	Investigate the feasibility of including natural areas selected for the habitat conservation plan as a component of the regional park system.
OS-P-20	Where possible, and with the cooperation of wildlife agencies, utilize Metropolitan Bakersfield Habitat Conservation Plan (MBHCP) resources to expand/create habitat preserves with the NBOSA.

PUBLIC SERVICES AND FACILITIES

BUILDOUT OF METROPOLITAN BAKERSFIELD IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY RESULT IN THE NEED FOR ADDITIONAL FIRE FACILITIES OR PERSONNEL.

Impact Analysis: The City of Bakersfield Fire Department and the Kern County Fire Department indicate that there would be an additional demand for fire services associated with buildout of the General Plan Update. Currently, the City of Bakersfield Fire Department's average response time for all emergency response calls is six minutes. The City of Bakersfield Fire Department's goal is an on scene time of six minutes or less. However, the City of Bakersfield Fire Department does not meet that response time in all areas of the City. Fire stations operated by the Kern County Fire Department within Metropolitan Bakersfield have been situated to meet an average response time of seven minutes or less. According to the Kern County Fire Department, the current level of fire protection, in general, is considered adequate in terms of service. In order to obtain and/or exceed response time goals, the Fire Departments have recognized the need for three additional fire stations located in west, northeast and northwest Bakersfield. The addition of the three stations would minimize travel times to response areas as

compared to existing fire stations. The stations would also provide fire protection for residents and businesses by the year 2010.

In general, the Kern County Fire Department and City of Bakersfield Fire Department have indicated that they have the capacity to protect life and property within Metropolitan Bakersfield. With currently adopted procedures and policies, there are no conflicts between City and County fire service responsibilities within Metropolitan Bakersfield.

As previously stated, a significant impact would occur if buildout of the General Plan would result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, the construction of which would cause significant environmental effects. Should buildout of Metropolitan Bakersfield occur at optimum levels, additional fire and paramedic resources would be required to meet future call volume and service demand. However, increased demand on fire services could not be incorporated into existing facilities as many facilities are operating at or near full utilization.

The General Plan Update includes goals and policies that serve to mitigate the impacts to fire protection services as a result of buildout of Metropolitan Bakersfield. General Plan implementation programs include that future city funding of fire protection operations and maintenance costs would be provided through City General Fund Tax Revenues. Additionally, bond issues, development fees, land dedications and/or assessment districts would facilitate fire protection services. Furthermore, fire agencies would mutually prepare and recommend area-specific ordinances to achieve efficiency and effectiveness of emergency medical services.

In summary, the goals and policies, as stated below, would reduce potentially significant impacts to fire protection services to less than significant levels.

Goals and Policies in the General Plan Update: The Land Use and Safety Element include the following goals and policies:

LU-G-6	Accommodate new development that is sensitive to the natural environment, and accounts for environmental hazards.
SAF/PS-G-1	Ensure that the Bakersfield metropolitan area maintains a high level of public safety for its citizenry.
SA/PS-G-2	Ensure that adequate police and fire services and facilities are available to meet the needs of current and future metropolitan residents through the coordination of planning and development of metropolitan police and fire facilities and services.
SAF/PS-G-3	Provide for the coordinated planning and development of

service areas for police and fire protection to ensure an equitable burden of responsibility between County and City in Metropolitan Bakersfield.

SAF/PS-G-4 Assure that fire, hazardous substance regulation and emergency medical service problems are continuously identified and addressed in a proactive way, in order to optimize safety and efficiency.

PSF/GU-G-1 Maintain a coordinated planning and implementation program for the provision of public utilities to the Planning area.

PSF/GU-G-2 Coordinate the planning and implementation of Planning area municipal-type utility facilities and services.

PSF/GU-G-4 Develop funding principles and programs which will assure that all new development will pay for the incremental costs of the public facilities and services--utilities bridges, parks, and public safety facilities--both on-site and off-site, to serve such development.

LU-P-50 Coordinate with the appropriate agencies so that adequate land and facilities are set aside for schools, parks, police/fire, libraries, cultural facilities, recreational facilities and other service uses to serve the community.

LU-P-79 Provide for an orderly outward expansion of new “urban” development (any commercial, industrial, and residential development having a density greater than one unit per acre) so that it maintains continuity of existing development, allows for the incremental expansion of infrastructure and public services, minimizes impacts on natural environmental resources, and provides a high quality environment for living and business.

SAF/PS-P-1 Identify future site locations, projected facility expansions, projected site acquisition costs, construction costs and operational costs in a manner that would maximize the efficiency of new public safety services.

SAF/PS-P-2 Require discretionary projects to assess impacts on police and fire services and facilities.

SAF/PS-P-3 Adopt uniform metropolitan area standards for fire and police services, and undertake continuing metropolitan area-wide planning programs for public safety facilities.

SAF/PS-P-4 Monitor, enforce and update as appropriate all emergency plans as needs and conditions in the planning area change,

including the California Earthquake Response Plan, the Kern County Evacuation Plan, and the City of Bakersfield Disaster Plan.

SAF/PS-P-5 Promote public education about fire safety at home and in the work place.

SAF/PS-P-6 Promote fire prevention methods to reduce service protection costs and costs to the taxpayer.

SAF/PS-P-7 Enforce ordinances regulating the use/manufacture/sale/ transport/disposal of hazardous substances, and require compliance with state and federal laws regulating such substances.

SAF/PS-P-8 The Kern County and Incorporated Cities Hazardous Waste Management Plan and Final Environmental Impact Report serves as the policy document guiding all facets of hazardous waste.

SAF/PS-P-9 Restrict, after appropriate public hearings, the use of fire-prone building materials in areas defined by the fire services as presenting high-conflagration risk.

SAF/PS-P-11 Expand emergency medical services by the City and County Fire Departments, and encourage the integration of ground and air, public and private resources to achieve efficiency and effectiveness of emergency medical services.

BUILDOUT OF METROPOLITAN BAKERSFIELD IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY RESULT IN THE NEED FOR ADDITIONAL POLICE FACILITIES OR PERSONNEL.

Impact Analysis: The City of Bakersfield Police Department has 1.3 officers per one thousand residents. The Bakersfield Police Department would like to have this ratio at 1.5 because other cities of comparable size have this ratio. The Kern County Sheriff's Department has 0.68 officers per one thousand residents within Metropolitan Bakersfield. Similarly, the staffing ratio for the Lamont substation response area is 0.65 officers per one thousand residents. The Sheriff's Department would like their staffing ration to be at 1.0 officer per one thousand residents.

Personnel needs for the City of Bakersfield Police Department and the Kern County Sheriff's Department vary based on types and intensity of land use, the age of development and a number of other factors. Thus, the number of personnel the Police Departments deploy to a specific geographic area cannot be precisely calculated based on population size. Currently, both City and County police facilities provide the minimum space necessary to house both sworn and support staff. In the planning horizon year of 2020, there would be an increase of both

population and development, which would result in the increase need for additional facility space, jail space, personnel, programs and equipment. Thus, implementation of the General Plan Update would result in potentially significant impacts to the City of Bakersfield Police Department and the Kern County Sheriff's Department.

The General Plan Update includes goals and policies that serve to mitigate the impacts to police protection services as a result of buildout of Metropolitan Bakersfield. General Plan implementation programs include that future city funding of police protection operations and maintenance costs which would be provided through City General Fund Tax Revenues. Additionally, bond issues, development fees, land dedications and/or assessment districts would facilitate police protection services. Furthermore, police agencies periodically review and update information system technology to increase effectiveness of police operations and programs, such as the Neighborhood Watch Program.

In summary, the goals and policies, as stated below, would reduce potentially significant impacts to police protection services to less than significant levels.

Goals and Policies in the General Plan Update: The Land Use and Safety Elements include the following goals and policies:

SAF/PS-G-1 Ensure that the Bakersfield metropolitan area maintains a high level of public safety for its citizenry.

SAF/PS-G-2 Ensure that adequate police and fire services and facilities are available to meet the needs of current and future metropolitan residents through the coordination of planning and development of metropolitan police and fire facilities and services.

SAF/PS-G-3 Provide for the coordinated planning and development of service areas for police and fire protection to ensure an equitable burden of responsibility between County and City in Metropolitan Bakersfield.

LU-P-50 Coordinate with the appropriate agencies so that adequate land and facilities are set aside for schools, parks, police/fire, libraries, cultural facilities, recreational facilities and other service uses to serve the community.

LU-P-79 Provide for an orderly outward expansion of new "urban" development (any commercial, industrial, and residential development having a density greater than one unit per acre) so that it maintains continuity of existing development, allows for the incremental expansion of infrastructure and public services, minimizes impacts on natural environmental resources, and provides a high quality environment for living

and business.

SAF/PS-P-1 Identify future site locations, projected facility expansions, projected site acquisition costs, construction costs and operational costs in a manner that would maximize the efficiency of new public safety services.

SAF/PS-P-2 Require discretionary projects to assess impacts on police and fire services and facilities.

SAF/PS-P-3 Adopt uniform metropolitan area standards for fire and police services, and undertake continuing metropolitan area-wide planning programs for public safety facilities.

SAF/PS-P-4 Monitor, enforce and update as appropriate all emergency plans as needs and conditions in the planning area change, including the California Earthquake Response Plan, the Kern County Evacuation Plan, and the City of Bakersfield Disaster Plan.

SAF/PS-P-10 Promote crime prevention through public education.

BUILDOUT OF METROPOLITAN BAKERSFIELD IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY RESULT IN ADVERSE PHYSICAL IMPACTS TO SCHOOL FACILITIES.

Impact Analysis: Utilizing the average City of Bakersfield's student generation rates (SGRs), buildout of Metropolitan Bakersfield would result in an increase of approximately 10,000 high school students, 6,560 middle school/junior high students and 17,460 elementary students.[18] Average SGRs per single family detached household (maximum scenario) in the City of Bakersfield are .253 ((.253 + .253)/2)) for high schools, .442 ((.476 + .408)/2)) for elementary schools and .166 ((.132 + .200/2)) for junior high/middle schools.

With many schools operating at, near and even above capacity, it is clear that existing school facilities do not have the sufficient capacity to serve the additional students generated from buildout of the General Plan Update. Thus, new facilities would need to be constructed at the elementary, middle school/junior high and high school levels. Development projects in Metropolitan Bakersfield would be subject to the payment of development fees levied in accordance with Education Code Section 17620 and Government Code Sections 65995, 65995.5 and 65995.7. School districts would also collect alternative school fees on residential developments, in accordance with the provisions of Senate Bill ("SB") 50. The payment of these fees would help to alleviate the impacts imposed on school districts as a result of new development within Metropolitan Bakersfield. In addition, the following goals and polices would reduce impacts to school facilities to less than significant levels.

[18] Assuming 39,500 dwelling units at General Plan Update Buildout.

Goals and Policies in the General Plan Update: The Land Use and Safety Elements include the following goals and policies:

LU-G-2 Accommodate new development which provides a full mix of uses to support its population.

LU-P-50 Coordinate with the appropriate agencies so that adequate land and facilities are set aside for schools, parks, police/fire, libraries, cultural facilities, recreational facilities and other service uses to serve the community.

LU-P-51 Encourage the continued development of California State University Bakersfield and adjacent areas for education, cultural and supporting commercial and residential uses.

LU-P-54 The developer shall be responsible for all on-site costs incurred as a result of the proposed project, in addition to a proportional share of off-site costs incurred in service extension or improvements. The availability of public or private services or resources shall be evaluated during discretionary project consideration. Availability may affect project approval or result in a reduction in size, density, or intensity otherwise indicated in the general plan's map provisions.

IMPLEMENTATION OF THE GENERAL PLAN UPDATE MAY RESULT IN AN INCREASED DEMAND FOR WATER AND REQUIRE THE EXPANSION OF EXISTING FACILITIES WITHIN METROPOLITAN BAKERSFIELD.

Impact Analysis: Based upon a water consumption factor of 325 gallons/day/ capita, future growth could result in an increased consumption of approximately 38,480,000 gallons per day.[19] The net increase in future water demand caused by population growth is expected to be reduced as a result of the conversion of agricultural lands to urban uses. Not all areas of Metropolitan Bakersfield would involve agricultural water converted to developed land usage.

Expansion of development to the northeast would convert vacant and/or undeveloped land to urban uses which clearly are not presently in agricultural production (the area between the boundaries of Irrigation District 4 and the Olcese Water District). Currently, a new water treatment plant is under construction.

The conservation of water supply through the City's long term program for banking excess water through the 2800 Acres Recharge Facility is a key in maintaining the water balance. On the average, there is an excess supply of 95 thousand acre-feet per year. The 2800 Acre program allows the City to retain a portion of

[19] Assuming 39,500 additional dwelling units at General Plan Update Buildout.

that water for future system reliability. Further, overall water use tends to decrease over time as increased emphasis is placed on both conservation and on recycling.[20]

Additionally, the City of Bakersfield has indicated that sufficient water supplies exist to serve Metropolitan Bakersfield and it is anticipated that supplies would be adequate to serve the projected growth indicated in the General Plan Update. Existing engineering studies, which address the ability of Metropolitan Bakersfield's water supplies to serve growth, provide data that indicates existing major water sources and water systems can meet future growth potential in Metropolitan Bakersfield, with the possible exception of the northeast non-district area. The groundwater recharge programs currently in place and being considered are key components of the overall programs which would assure such adequacy.[21] In summary, the General Plan Update goals and policies would reduce potentially significant impacts to water resources to less than significant levels.

Water Distribution

Approximately 43,000 acres of the land designated for these uses within Metropolitan Bakersfield Plan are undeveloped; as such, an extension of the existing water system would be required to provide water service to these areas. Currently, there are no water distribution or water service areas east of the East Niles and California Water service areas until the westerly boundary of Olcese Water District is reached. However, this would change upon completion of a water facility in northeast Bakersfield, scheduled to be constructed by 2003.[22]

The water purveyors that serve the Metropolitan Bakersfield Planning area, including the City of Bakersfield Ashe, Fairhaven, and Riverlakes Domestic Water Systems, California Water Service Company, Vaughn Water Company, North of the River Municipal Water District, Oildale Mutual Water Company and East Niles Community Service District, have indicated that their respective water systems are currently reliable and that no significant deficiencies exist in their facilities and services. Despite the fact that various communities throughout Metropolitan Bakersfield are older and their associated distribution systems would eventually need upsizing and/or replacement, existing service to these areas is adequate. As Metropolitan Bakersfield grows, new facilities such as water wells, booster facilities, water storage facilities, water transmission mains, etc. would be required to keep up with demand. Existing facilities may also be required to be upgraded or enlarged as needed.

The General Plan Update contains a number of goals and policies that are necessary to ensure adequate water distribution service and/or facilities for the uses in Metropolitan Bakersfield, and are intended to offset associated impacts.

[20] Telephone Conversation with Gabrielle Kidwell, Engineering Technician III, Kern County Waste Management Department. January 2, 2002.

[21] Metropolitan Bakersfield General Plan Update, Public Services and Facilities Element. March 2001.
[22] Metropolitan General Plan Update, Public Services and Facilities Element. March 2001.

The General Plan Update's goal regarding water distribution facilities is to ensure the provision of adequate water service to all developed and developing portions of the Planning area. Policies state that the intent is to reach agreement regarding mutually beneficial improvements in domestic water service and distribution facilities as required to improve overall metropolitan service capabilities. The objectives of the other relevant policies is to continue to provide domestic water facilities which are contributed directly by developers; and require that all new development proposals have and adequate water supply available. Thus, the General Plan Update would result in less than significant impacts associated with water distribution and/or distribution facilities.

Goals and Policies Proposed in the General Plan Update: The Conservation, Public Services and Facilities, and the Land Use Elements include the following goals and policies:

CONS/WR-G-1 Conserve and augment the available water resources of the planning area.

CONS/WR-G-2 Assure that adequate groundwater resources remain available to the planning area.

CONS/WR-G-3 Assure that adequate surface water supplies remain available to the planning area.

CONS/WR-G-4 Continue cooperative planning for and implementation of programs and projects which will resolve water resource deficiencies and water quality problems.

CONS/WR-G-5 Achieve a continuing balance between competing demands for water resource usage.

CONS/WR-G-6 Maintain effective cooperative planning programs for water resource conservation and utilization in the planning area by involving all responsible water agencies in the planning process.

CON/WR-P-1 Develop and maintain facilities for groundwater recharge in the Planning area.

CON/WR-P-2 Minimize the loss of water which could otherwise be utilized for groundwater recharge purposes and benefit Planning area groundwater aquifers from diversion to locations outside the area.

CON/WR-P-3 Support programs to convey water from other than San Joaquin Valley basin sources to the Planning area.

CON/WR-P-4 Support programs and policies which assure continuance or

augmentation of Kern River surface water supplies.

CON/WR-P-5	Work towards resolving the problem of groundwater resource deficiencies in the upland portions of the Planning area.
CON/WR-P-6	Protect Planning area groundwater resources from further quality degradation.
CON/WR-P-7	Provide substitute or supplemental water resources to areas already impacted by groundwater quality degradation by supporting facilities construction for surface water diversions.
CON/WR-P-8	Consider each proposal for water resource usage within the context of total Planning area needs and priorities: major incremental water transport, groundwater recharge, flood control, recreational needs, riparian habitat preservation and conservation.
CON/WR-P-9	Encourage and implement water conservation measures and programs.
CON/MR-G-4	Protect land, water, air quality and visual resources from environmental damage resulting from mineral and energy resource development.
PSF/WD-G-1	Ensure the provision of adequate water service to all developed and developing portions of the Planning area.
PSF/WD-P-1	Reach agreement regarding mutually beneficial improvements in domestic water service and distribution facilities as required to improve overall metropolitan water service capabilities.
PSF/WD-P-2	Continue to provide domestic water facilities which are contributed directly by developers, through development and/or availability fees.
PSF/WD-P-3	Require that all new development proposals have an adequate water supply available.
LU-P-92	In the county, all residential developments that provide complete public infrastructure improvements including community water distribution and sewage collection and treatment systems may be permitted a density increase up to 20 percent. All land division activities shall be consistent with this provision.

BUILDOUT OF METROPOLITAN BAKERSFIELD IN ACCORDANCE WITH

THE GENERAL PLAN UPDATE COULD RESULT IN INCREASED DEMAND FOR SOLID WASTE SERVICES.

Impact Analysis: Implementation of the General Plan Update would not result in additional impacts related to solid waste within Metropolitan Bakersfield. Furthermore, due to the mandates set forth in AB 939, the California Integrated Waste Management Act, the amount of solid waste anticipated as a result of development has been reduced to lower levels.

Kern County's Countywide Integrated Waste Management Plan (CIWMP) contains future solid waste disposal demand based on the City and County population projections previously adopted by the Board of Supervisors. The Integrated Waste Management Department (IWMD) database shows that the Kern County landfill system that serves Metropolitan Bakersfield has capacity in excess of 30 years. This is well above the 15-year threshold established by the California Integrated Waste Management Board.

Furthermore, it should be noted that the State of California has required that by the start of 2000, each city and county demonstrate a reduction of at least 50 percent in the amount of waste from that jurisdiction which previously was routed into landfills in 1990. The State requires that this level of reduction be sustained in perpetuity. As a direct result of the California requirements, the City of Bakersfield and Unincorporated Kern County have adopted Source Reduction and Recycling Elements (SRRE), which implement measures to increase recycling within the City and Unincorporated portions of Metropolitan Bakersfield. In 2000, the City of Bakersfield managed to divert ~~44~~ 49 percent of its waste stream from landfills. According to the City of Bakersfield Public Works Department, the City will achieve the 50 percent reduction mandate by 2003. On the other hand, Unincorporated Kern County diverted 52 percent of its waste stream in 2000. Thus, achieving the 50 percent reduction mandate.

Implementation of the following General Plan Update goals and policies would reduce any potentially significant solid waste impacts to less than significant levels

Goals and Policies in the General Plan Update: The Land Use and Public Services and Facilities Elements include the following goals and policies:

PSF/SW-G-1 Ensure the provision of adequate solid waste disposal services to meet the demand for these services in the planning area.

PSF/SW-G-2 Evaluate, and develop as feasible, resource recovery and recycling systems.

PSF/SW-P-1 Comply with, and update as required, the adopted county solid waste management plan.

PSF/SW-P-2 A designated site for solid waste disposal or large transfer

station facilities (Solid Waste Facility Sites: P-SW) shall be protected from encroachment of incompatible land uses and intensive urban development. General Plan map code designations which may be compatible for properties adjacent to or near solid waste facilities include the following: Public Facilities; Light Industrial; Service Industrial; Heavy Industrial; Intensive Agriculture; Extensive Agriculture; Mineral and Petroleum.

Other land use map code designations may be compatible subject to project-specific CEQA evaluation. Intensive residential uses, community care facilities, schools, hospitals, recreational vehicle parks and other uses involving sensitive populations, concentrations of people and other activities will usually be incompatible adjacent to or near solid waste facilities.

When considering a land use application next to a designated solid waste facility site, the following issues will be considered through the CEQA process when determining compatibility;

1. Land use compatibility based on the character and intensity of use;
2. Potential for groundwater contamination;
3. Potential for methane gas migration;
4. Operational effects of the solid waste facility to the proposed land use application including traffic, odor, noise, vectors, and dust; and
5. Other issues relevant to the specific proposal and as determined through the environmental and public hearing review process.

Risk Assessment analysis prepared by the land use project applicants may be warranted when considering proposals for General Plan Amendments, zone changes, conditional use permits, and subdivision tracts adjacent or near to designated solid waste facilities.

PARKS AND RECREATION

GROWTH AND DEVELOPMENT ASSOCIATED WITH THE GENERAL PLAN UPDATE WOULD RESULT IN INCREASED USE OF EXISTING RECREATIONAL AND PARK FACILITIES, POTENTIALLY CAUSING PHYSICAL DETERIORATION OF EACH FACILITY.

Impact Analysis: Future development would result in both direct and indirect impacts upon existing park and recreational resources. Direct impacts to existing recreational facilities could occur as a result of the anticipated residential

development and the corresponding increases in population. The projected population increase could substantially increase the usage of existing recreational facilities such that their quality would degrade and/or physical deterioration would occur or be accelerated. Further, a population increase would aggravate the already existing deficiency of parkland in the Planning area.

Indirect impacts to existing recreational and park resources would occur as a result of the anticipated commercial and industrial development. Although it is uncertain to what degree, the potential exists that employees of future commercial/industrial development may increase the usage of existing park and recreational resources. The increased usage of existing recreational facilities by future employees could potentially degrade their quality and/or cause physical deterioration of each. Increased usage of recreational facilities from future employees, coupled with the increased usage from future residents, would aggravate the already existing deficiency of parkland in the Planning area.

Funding from the General Fund in both the City and the County provides maintenance of park sites within the Planning area, and through the creation of maintenance districts, whereby residents benefitting from parks would pay all maintenance costs. The Parks Element has identified implementation programs that would accomplish the following:

- Establishment and implementation of an official park acquisition program to meet current and future needs. The program would allow the use of "general funds for park acquisition, development and maintenance" under certain conditions.

- Establishment of a program of design and improvement review, landscape development, and maintenance of parks, recreational buildings, and community facilities.

- Establishment of an interjurisdictional body whose function is to coordination of development and maintenance of parks and recreational facilities with other public services.

Additionally, the Parks and Open Space Elements have included goals and policies intended to address the maintenance of parks and recreational resources (outlined below). Continued use of general funds, implementation of the specified programs, and compliance with the goals and policies would reduce potential impacts to existing recreation and parks resources to a less than significant level. In addition, compliance with Municipal Code requirements for new development relative to parkland dedication/payment of fees would further minimize impacts to existing facilities through the development of new facilities (refer to the *Future Park and Recreation Resources* discussion below).

Goals and Policies in the General Plan Update: The Parks and Open Space Elements contain the following goals and policies:

PAR-G-6	Ensure the all park and recreation facilities are adequately designed, landscaped, and maintained.
PAR-P-12	Encourage development and maintenance of regional parks and recreational facilities through the cooperation of the City of Bakersfield, the County of Kern, the North Bakersfield Recreation and Park District, and the Bear Mountain Recreation District.
PAR-P-22	Attempt to provide and promote the use of alternative public funding for the acquisition, development and maintenance of parks and recreational facilities in low and moderate income neighborhoods in which there is a recognized shortage of parks.
PAR-P-31	Establish a program of design and improvement review, landscape development, and maintenance of parks, city and county building grounds and public works projects, with quality standards established commensurate with intended function and relative impact on surrounding area.
PAR-P-35	Encourage the development of recreation programs by public agencies and sports organizations to involve more children and adults in outdoor recreation activity. Use volunteers to operate and maintain programs whenever possible.
PAR-P-41	Provide for the creation of benefit assessment districts for park acquisition, development and maintenance. These districts should conform as closely as possible to benefit service areas.
OS-P-1	Promote the establishment, maintenance and protection of the Planning areas open space resources, including the following: a) Conservation of natural resources (refer to Chapter II-Land Use, Chapter V-Conservation, and Chapter XII Kern River Plan Element). • Kern River corridor • Management of hillsides b) Managed production of resources • Agriculture (refer to Chapter V-Conservation/Soils and Agriculture) • Oil production (refer to Chapter V-Conservation/Mineral Resources)

c) Outdoor recreation

- Parks (refer to Chapter XI-Parks)
- Kern River corridor (refer to Chapter II-Land Use, Chapter V-Conservation, and Chapter XII-Kern River Plan Element)

d) Public health and safety

- Hazard avoidance (refer to Chapter VIII-Safety)

THE GENERAL PLAN UPDATE WOULD CREATE A DEMAND FOR ADDITIONAL PARK AND RECREATION RESOURCES WITHIN THE METROPOLITAN BAKERSFIELD AREA.

Impact Analysis: Residential development and resultant population increase projected with the General Plan Update would create a demand for additional parkland. As indicated in Table 4.12-3, *Estimated Parkland Demand*, of the Final EIR, the anticipated residential development and corresponding population increases would create a total demand for approximately 890 acres of parkland based on National Standards and 840 acres of parkland based on policies contained in the Parks Element. Additionally, the Recreation and Parks Master Plan has identified the future recreational needs of the Planning area based on existing resources/programs, historic growth and use patterns, resident input, and national standards.

In addition, the Recreation and Parks Master Plan has identified several policies regarding future recreation programs including implementation of a policy making the Department of Recreation and Parks the primary provider of public offered recreation programs. The Open Space land use category, which encompasses a total of approximately 18,000 acres or approximately seven percent of the Planning area. As is evident, sufficient area exists for development of the parkland needed to meet the demand for recreational and park resources (between 840 and 890 acres) created by the General Plan Update.

Pursuant to California Government Code Section 66477 (Quimby Act), the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative map or parcel map. Pursuant to Bakersfield Municipal Code Section 15.80, and in compliance with the Quimby Act, project applicants would be required to either dedicate land, or pay in lieu fees, for development of park land. Developers of new residential uses are required to provide 2.5 acres of parkland per 1,000 population. The anticipated population increases would create a total demand for approximately 140 acres of parkland based on the Municipal Code standard. The estimated demand for parkland pursuant to the Municipal Code is less than the estimated demand based on National Standards. However,

developers would also be required to pay park development fees of $670 per each new single-family residential building permit.

Pursuant to Chapter 18.96 of the Kern County Land Division Ordinance, *Park Land Dedication, North Bakersfield Recreation and Park District*, as a condition of approval of a tentative subdivision map or residential parcel map within the jurisdiction of the North Bakersfield Recreation and Park District, the subdivider is required to dedicate land, pay a fee in lieu thereof, or both, as set forth in this chapter, for park or recreational purposes. This Chapter requires the dedication of 2.5 acres of land per 1,000 persons and/or the payment of fees in lieu of land dedication.

Implementation of the General Plan Update would create a demand for additional recreational and park resources. However, the Parks Element has identified various programs for meeting this future demand. Implementation of these programs, in addition to the goals and policies from the Parks, Open Space and Land Use Elements listed below, would meet the future demand on a project-by-project basis. It is not anticipated that the future demand would further aggravate the Planning area's existing parkland deficiency. Impacts in this regard would be considered less than significant.

Goals and Policies in the General Plan Update: The Parks, Land Use, and Open Space Elements contain the following goals and policies:

PAR-G-1	Provide parks and recreation facilities to meet the planning area's diverse needs.
PAR-G-2	Supply neighborhood parks at a minimum of 2.5 acres per 1,000 persons throughout the plan area.
PAR-G-3	Provide four acres of park and recreation space for each 1,000 persons (based on the most recent census) for general regional recreation opportunity and minimum standard. Park and recreational space includes mini-parks, neighborhood parks, community parks and regional parks.
PAR-G-4	Provide a diversity of programs and facilities to meet the needs for the full range of citizen groups including the elderly, handicapped, and economically disadvantaged.
PAR-G-5	Coordinate development of park facilities and trail systems throughout the plan area which enhance the centers concept and complement unique visual or natural resources.
PAR-G-6	Ensure the all park and recreation facilities are adequately designed, landscaped, and maintained.
PAR-G-7	Require that the costs of park and recreation facilities and

programs are borne by those who benefit from and contribute to additional demand.

PAR-G-9 Coordinate efforts by volunteer agencies, civic organizations, private enterprise and all government entities to assure the provision of a complete range of recreation opportunities for all residents of the planning area.

PAR-P-1 Require that neighborhood parks be developed at a minimum rate of 2.5 acres per 1,000 population. This requirement may be met all or in part by on-site recreation for such developments as Planned Unit Developments. The City of Bakersfield may allow credit to meet the neighborhood parks requirement.

PAR-P-2 Allow the formation of special park districts which provide higher park standards than the minimum stated in Policy PAR-P-1.

PAR-P-3 Require developers to dedicate land, provide improvements and/or in lieu fees to serve the needs of the population in newly developing areas.

PAR-P-4 Require developers of new subdivisions to show and adhere to park locations (depicted on the Land Use Element). Park locations identified in master plans approved prior to adoption of this General Plan are reflected in this plan. Variations may be allowed based on certain constraints. See Policy PAR-P-6.

PAR-P-5 Establish as a target that mini-parks and neighborhood parks within the City of Bakersfield jurisdiction be situated within 0.75 miles of residents they are intended to serve.

PAR-P-6 Provide additional neighborhood and community parks and recreation acreage in areas substantially developed or in the process of redevelopment or improvement, using a combination of public funds, in lieu developers fees, and benefit assessment districts.

PAR-P-7 Provide mini-parks in developed residential areas where neighborhood standards are not met and where it is impossible to acquire sufficient acreage for neighborhood facilities. Use the same funding mechanisms indicated in Policy PAR-P-6.

PAR-P-8 Require the following minimum site size standards in planning and acquiring of local parks and playgrounds:

Mini-parks (public): -2.5 usable acres
Neighborhood parks/playgrounds: -10.0 usable acres
Community park/playfield: -20.0 usable acres

These acreages are intended as guides for City and County improvements. Variations may be allowed based on constraints such as land availability, natural obstacles, financing, funding and maintenance costs. The above acreage figures apply to usable acreage. Usable means an area that people can use, with an emphasis on active and group use. It is essentially flat land that can be developed for facilities and activity areas. It is not land steeper than 4 feet horizontal and 1 foot vertical in slope, land with unusually poor soil conditions, land subject to flood water stagnation, land with riparian or otherwise unique habitat worthy of preservation or water bodies or areas impacted adversely by adjacent or nearby land uses.

PAR-P-9 Allow neighborhood park requirements to be met by community parks when community parks are situated within or at the boundaries of neighborhoods and when they provide equivalent facilities.

PAR-P-10 Encourage schools to make playgrounds and playfields available to local residents after normal school hours and on weekends.

PAR-P-11 Evaluate the feasibility of using publicly-owned lands and utility rights-of-way as recreational facilities.

PAR-P-12 Encourage development and maintenance of regional parks and recreational facilities through the cooperation of the City of Bakersfield, the County of Kern, the North Bakersfield Recreation and park District, and the Bear Mountain Recreation District.

PAR-P-13 Evaluate the feasibility of including new regional parks as a component of proposed groundwater recharge areas.

PAR-P-14 Plan for and expend regional recreation opportunity in connection with the development and conservation of appropriate areas along the Kern River.

PAR-P-15 Designate multiple purpose areas for recreation and park use within the Kern River Plan area and in accordance with the goals and policies in the Kern River Plan Element.

PAR-P-16	Accommodate social, cultural and ethnic needs in the design and programming of recreational spaces and facilities.
PAR-P-17	Attempt to locate parks and design facilities to meet the needs of all population segments including children, seniors and the disabled.
PAR-P-18	Attempt to provide special recreational programs for seniors on fixed incomes, latch-key children, and the economically disadvantaged.
PAR-P-19	Locate and design local park and recreation areas for access to all age groups where practicable. Provide facilities for both active (play areas and courts) and passive (turf, walk-ways, trees and picnic facilities where possible) recreational activity.
PAR-P-20	Operate programs at times convenient to the users.
PAR-P-21	Establish both passive and active park development in local parks to accommodate programmed activities and drop-in use. Some usable area should be held as open turf for free play.
PAR-P-22	Attempt to provide and promote the use of alternative public funding for the acquisition, development and maintenance of parks and recreational facilities in low and moderate income neighborhoods in which there is a recognized shortage of parks.
PAR-P-23	Encourage the development of parks adjacent to schools in order to provide a wider range of programs.
PAR-P-24	Monitor program needs through surveys of neighborhood residents or other participation mechanisms and through periodic reviews of park and recreational needs.
PAR-P-25	Promote the preservation of existing parks and encourage the development of other facilities near downtown.
PAR-P-26	Encourage the further development of the City of Bakersfield's specific trails plan.
PAR-P-27	Encourage pedestrian and bicycle linkages between residential and commercial uses.
PAR-P-28	Encourage the establishment of equestrian trails where they link residential development to the Kern River in areas of the northeast and northwest where horses are permitted by

zoning.

PAR-P-29 Design equestrian trails, hiking and bicycling rights-of-way to minimize user conflicts between them.

PAR-P-30 Evaluate the feasibility of using utility easements for recreational activity.

PAR-P-31 Establish a program of design and improvement review, landscape development, and maintenance of parks, city and county building grounds and public works projects, with quality standards established commensurate with intended function and relative impact on surrounding area.

PAR-P-32 Encourage variety in the design of park facilities to enhance the lifestyle of residents to be served.

PAR-P-33 Monitor the parkland dedication ordinance with in lieu fee provisions.

PAR-P-34 Encourage coordination in the acquisition, development and use of parks and schools to avoid duplication of facilities and provide economic use of public funds.

PAR-P-35 Encourage the development of recreation programs by public agencies and sports organizations to involve more children and adults in outdoor recreation activity. Use volunteers to operate and maintain programs whenever possible.

PAR-P-36 Monitor the official park acquisition program to meet current and future needs. The program includes direct input for capital budgeting purposes including the scheduling of park dedication. The program is reviewed periodically with respect to changing growth rates and General Plan policies.

PAR-P-37 Establish a formal mechanism by which the city may accept gifts and dedications of parks and open space.

PAR-P-38 Consider the use of eminent domain where siting of a park is required to serve neighborhood needs for parks and recreational facilities.

PAR-P-39 Consider the formation of Community Facilities Districts, especially in newly developing areas.

PAR-P-40 Consider the use of special taxes for financing services or facilities.

PAR-P-41	Provide for the creation of benefit assessment districts for park acquisition, development and maintenance. These districts should conform as closely as possible to benefit service areas.
PAR-P-42	Encourage a community-wide parks and recreation district to equitably distribute support for the park system.
PAR-P-43	Encourage the development of private and commercial recreation facilities under lease or concession agreements where such facilities are consistent with planned development and offer expanded recreation opportunities to the public.
PAR-P-44	Study the feasibility of a recreation and land management program allowing for the generation of supplemental revenue to offset the cost of necessary further land acquisition, development and operational cost. This could include establishing concessions, rentals, user fees and land leases.
PAR-P-45	Develop lighted playing fields on community park sites.
PAR-P-48	Situate swimming pools near high schools, wherever possible, and with convenient access to elementary schools.
PAR-P-52	Ensure that all park facilities be developed consistent with policies in applicable planning documents and elements of the General Plan.
PAR-P-53	Coordinate the provision of park facilities with other public services and facilities, especially schools and public roads.
PAR-P-54	Coordinate the location, planning, and functional uses of all park and recreational facilities with affected local governmental entities and where feasible, promote joint acquisition and/or development to assure effective coverage of all needs.
PAR-P-55	Seek out and encourage the provision of volunteer assistance from civic organizations, special interest groups, and individuals to provide program leadership or facility development to augment recreation opportunities.
PAR-P-56	Periodically evaluate the planning area to evaluate park deficiencies
PAR-P-57	Central Park should be expanded to facilitate the City of Bakersfield in identifying and recognizing its historical heritage, the heart of historic Bakersfield, and to enhance the

urban environment of the downtown area.

LU-P-50 Coordinate with the appropriate agencies so that adequate land and facilities are set aside for schools, parks, police/fire, libraries, cultural facilities, recreational facilities and other service uses to serve the community.

OS-P-1 Promote the establishment, maintenance and protection of the Planning areas open space resources, including the following:

a) Conservation of natural resources (refer to Chapter II-Land Use, Chapter V-Conservation, and Chapter XII Kern River Plan Element).

- Kern River corridor
- Management of hillsides

b) Managed production of resources

- Agriculture (refer to Chapter V-Conservation/Soils and Agriculture)
- Oil production (refer to Chapter V-Conservation/Mineral Resources)

c) Outdoor recreation

- Parks (refer to Chapter XI-Parks)
- Kern River corridor (refer to Chapter II-Land Use, Chapter V-Conservation, and Chapter XII-Kern River Plan Element)

d) Public health and safety

- Hazard avoidance (refer to Chapter VIII-Safety)

OS-P-7 Consider the use of groundwater recharge lands for recreation, habitat and alternate resource uses.

OS-P-8 Consider reuse of abandoned landfill areas for recreational and open space purposes where it can be shown that the landfill does not present a health hazard.

PUBLIC HEALTH AND SAFETY

BUILDOUT OF METROPOLITAN BAKERSFIED IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY RESULT IN HUMAN HEALTH IMPACTS ASSOCIATED WITH EXPOSURE TO RADON EMISSIONS.

Impact Analysis: In 1993, the United States Environmental Protection Agency and the United States Geological Survey released the California Chapter of the Radon Potential Map of the United States (EPA's Map of Radon Zones, California, September, 1993). This report identified the radon potential for each county in California. Radon potential is classified into one of three designations or zones.

Counties in which potential radon levels are predicted to exceed indoor screening levels of 4 pico curies per liter (pCi/L) are considered to be in Zone 1. The recommended level at which corrective action to minimize exposure should be initiated to reduce radon in structures is 4 pCi/L. Counties with predicted indoor radon screening levels between 2 and 4 pCi/L are in Zone 2, while those with predicted indoor screening levels below 2 pCi/L are in Zone 3. Kern County is categorized in Zone 2 which is below the level recommended for corrective action. The radon potential map provides a generalized indication of radon levels in California. Determining actual radon levels in buildings requires detailed testing.

The General Plan Update does not specifically address environmental risks to human health associated with exposure to radon emissions. Because of the aforementioned EPA Study, the Kern County Environmental Health Services Department does not believe there to be a serious radon exposure problem within the Metropolitan Bakersfield area.

Goals and Policies in the General Plan Update: The Safety Element includes the following goal:

SAF/PS-G-1 Ensure that the Bakersfield metropolitan area maintains a high level of public safety for its citizenry.

BUILDOUT OF METROPOLITAN BAKERSFIELD IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY RESULT IN INCREASED RISK OF UPSET ASSOCIATED WITH THE ROUTINE USE, GENERATION, AND TRANSPORTATION OF HAZARDOUS MATERIALS, WHICH MAY POTENTIALLY POSE A HEALTH OR SAFETY HAZARD.

Impact Analysis: New non-residential development within Metropolitan Bakersfield may result in an increase in commercial and industrial land uses involving the use of hazardous materials or generation of hazardous waste. The types and quantities of hazardous materials utilized by the various types of businesses that could locate in Metropolitan Bakersfield would vary tremendously and, as a result, the nature of potential hazards would also be varied. Such substances can range from common automobile oil and household pesticides to chlorine, dry-cleaning solutions, ammonia, or substances used in commercial and industrial operations. Since the General Plan Update does not include any specific development projects, no specific type of hazard associated with these materials can be identified and the likelihood of a hazard presenting a serious health or safety to the public cannot be determined at this time. However, it can be generally concluded that any additional non-residential development within Metropolitan

Bakersfield would result in an increase in the use and transport of hazardous materials and an increase in generation of hazardous waste. The consequence of this increased presence of hazardous materials in Metropolitan Bakersfield is an increase in the potential for human exposure to these substances, with possible public health and safety consequences.

Development based on the General Plan Update should have very little effect on the amount of wastes associated with oil production since oil production is dependent upon worldwide and not regional demand. Development in accordance with the General Plan Update would slightly reduce the amount of wastes associated with agricultural pesticides because development would reduce agricultural lands within Metropolitan Bakersfield. Assuming that present hazardous waste generation rates remain the same, implementation of the General Plan Update could increase industrial waste and household hazardous waste. However, the County's Hazardous Waste Management Plan (HWMP) includes waste reduction methods that would serve to reduce the amount of waste generated.

New development that locates near residential areas or within ¼-mile from a school could expose these sensitive land uses to greater risk of exposure to hazardous materials, wastes or emissions. In most instances, a buffer in the form of a major street, channel, or intervening land use separates residential areas from industrial areas. Also, the General Plan Update Land Use Element has located industrial areas near State and/or Federally maintained roads to avoid transport of hazardous wastes through residential or other highly populated areas.

The Kern County and Incorporated Cities Hazardous Waste Management Plan (HWMP) lists goals and policies regarding the transport of hazardous wastes. The HWMP recognizes that transportation of hazardous waste on roads poses a short-term threat to public health; of prime concern is the safety of the transportation system for hazardous waste, especially extremely hazardous waste, in and through Kern County. The HWMP seeks to establish State and Federally maintained roads as candidate Commercial Hazardous Waste Shipping Routes in and through the County (except those necessary to collect locally generated hazardous wastes). Also, implementation of the HWMP would potentially allow the County to further restrict hazardous waste shipping on routes which pose a threat to surface water bodies or aqueducts, or on roads which are generally unsafe as determined by specified hazardous waste facility applicants' transportation risk assessments and by guidelines afforded by the State of California Department of Health Services and Vehicle Code Section 31304, and CCR Title 26 Division 6 provisions.

While the risk of exposure to hazardous materials cannot be eliminated, measures can be implemented to maintain risks to acceptable levels. As described in the Settings section, there are several federal, state and local regulatory agencies that oversee hazardous materials handling and management. Oversight by the appropriate agencies and compliance with applicable regulations are considered adequate to offset the negative effects related to the use and transport of

hazardous materials in Metropolitan Bakersfield.

In addition, the following General Plan Update goals and policies would further reduce hazardous materials impacts to a less than significant level.

Goals and Policies in the General Plan Update: The Safety and Land Use Elements include the following goals and policies:

SAF/PS-G-1	Ensure that the Bakersfield metropolitan area maintains a high level of public safety for its citizenry.
SAF/PS-G-4	Assure that fire, hazardous substance regulation and emergency medical service problems are continuously identified and addressed in a proactive way, in order to optimize safety and efficiency.
SAF/PS-P-7	Enforce ordinances regulating the use/manufacture/sale/transport/ disposal of hazardous substances, and require compliance with state and federal laws regulating such substances.
SAF/PS-P-8	The Kern County and Incorporated Cities Hazardous Waste Management Plan and Final Environmental Impact Report serves as the policy document guiding all facets of hazardous waste.
LU-P-14	Require all multi-family residential land uses be adequately set back from the street.
LU-P-38	Minimize impacts of industrial traffic on adjacent residential parcels through the use of site plan review and improvement standards.

ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS USES, STORED, OR TRANSPORTED IN METROPOLITAN BAKERSFIELD MAY RESULT IN A PUBLIC HEALTH RISK.

Impact Analysis: The increased use and transport of hazardous materials in Metropolitan Bakersfield increases the potential for accidental releases of hazardous materials. Typical incidents that could result in accidental release of hazardous materials including leaking underground storage tanks, accidents during transport causing a “spill” of a hazardous material, and/or natural disasters causing the unauthorized release of a substance. These and other types of incidents could cause contamination of soil, surface water, and groundwater, in addition to any toxic fumes that might be generated. If not cleaned up immediately and completely, the same hazardous substances could migrate into the soil or enter a local stream channel causing contamination of soil and water. Contamination of the local groundwater table could also occur. Depending on the nature and extent of the contamination, groundwater supplies could become

unsuitable for use as a domestic water source. Human exposure to contaminated soil or water could have potential health effects depending on a variety of factors, including the nature of the contaminant and the degree of exposure.

Accidental releases would most likely occur in the commercial and industrial areas and along transport routes leading to and from these areas. Commercial and industrial areas are distributed through Metropolitan Bakersfield, including concentrations of businesses located in the Oildale, East Bakersfield, Urban Northwest, Urban Southeast and Urban Southwest areas. Transportation routes include freeways and main surface streets.

The use and storage of hazardous substances is regulated by CalEPA, the State Water Resources Control Board, Bakersfield Fire Department, Kern County Fire Department and the Kern County Environmental Health Services Department. The California Highway Patrol and the California Department of Transportation enforce hazardous substance transportation regulations. The Bakersfield and Kern County Fire Departments provide emergency response to accidental release of hazardous substances. The Hazardous Materials Release Response Plans and Inventory Law of 1985 (or the Business Plan Act) requires that a business that uses, handles, or stores hazardous materials above a certain quantity prepare a plan which must include an inventory of hazardous substances on the premises. A Risk Management and Prevention Plan (RMPP) may be required for businesses that use acutely hazardous substances and are located in proximity to sensitive land uses. As part of the RMPP, businesses that handle acutely hazardous materials must include a hazard and operability study (HAZOP) which analyze potential hazards to sensitive populations in the vicinity. The Bakersfield and Kern County Fire Departments oversee the submittal of Business Emergency Plans, which are intended to mitigate potential releases of hazardous substances and minimize potential harm or damage. Oversight by the appropriate agencies and compliance with applicable regulations are considered adequate to offset the negative effects related to the accidental release of hazardous materials in Metropolitan Bakersfield. In addition, the following General Plan Update goals and policies would further reduce hazardous materials impacts to a less than significant level.

Goals and Policies in the General Plan Update: The Safety Element and Land Use Element include the following goals and policies:

SAF/PS-G-1 Ensure that the Bakersfield metropolitan area maintains a high level of public safety for its citizenry.

SAF/PS-G-4 Assure that fire, hazardous substance regulation and emergency medical service problems are continuously identified and addressed in a proactive way, in order to optimize safety and efficiency.

SAF/PS-P-7 Enforce ordinances regulating the use/manufacture/sale/transport/ disposal of hazardous

substances, and require compliance with state and federal laws regulating such substances.

SAF/PS-P-8 The Kern County and Incorporated Cities Hazardous Waste Management Plan and Final Environmental Impact Report serves as the policy document guiding all facets of hazardous waste.

LU-P-14 Require all multi-family residential land uses be adequately set back from the street.

LU-P-38 Minimize impacts of industrial traffic on adjacent residential parcels through the use of site plan review and improvement standards.

BUILDOUT OF METROPOLITAN BAKERSFIELD IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY RESULT IN ADDITIONAL SOURCES OF AIR TOXIC EMISSIONS, POTENTIALLY INCREASING EXPOSURE OF RESIDENTS AND EMPLOYEES TO AIR TOXICS.

Impact Analysis: As a result of buildout of the General Plan Update, new commercial and industrial uses developed in Metropolitan Bakersfield would increase the potential sources of air toxic emissions. Additional sources of air toxic emissions in Metropolitan Bakersfield would contribute to risk of human exposure to toxic substances. Human exposure to toxic air emissions could have potential health effects depending on a variety of factors, including the nature and concentration of the toxic substance and the degree of exposure. As with other toxic substances, people who face the greatest potential for exposure to toxic air emissions are those who reside or work in close proximity to emission sources. Toxic air emissions differ from other hazardous substances in that air currents can easily transport them. While this allows these emissions to be quickly carried over relatively large distances when released into the open air (depending on atmosphere conditions), it can also cause the emissions to be readily dispersed into lower concentrations.

The San Joaquin Valley Unified Air Pollution Control District (APCD) works with the California Air Resources Board (CARB) and is responsible for developing and implementing rules and regulations regarding air toxics on a local level. The APCD establishes permitting requirements, inspects emission sources (commercial and industrial facilities), and enforces measures through educational programs and/or fines. Existing regulations, permitting requirements, and facility inspections by the APCD are considered adequate to reduce this impact to a less than significant level. In addition, the following General Plan Update goals and policies would further reduce impacts to a less than significant level.

Goals and Policies in the General Plan Update: The Safety Element and Conservation Element include the following goals and policies:

SAF/PS-G-1	Ensure that the Bakersfield metropolitan area maintains a high level of public safety for its citizenry.
CON/AQ-G-1	Promote air quality that is compatible with health, well being, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants.
CON/AQ-G-2	Continue working toward attainment of Federal, State and Local standards as enforced by the San Joaquin Valley Unified Air Pollution Control District.
CON/AQ-G-3	Reduce the amount of vehicular emissions in the Planning area.
CON/AQ-G-4	Reduce air pollution associated with agricultural activities.
SAF/PS-G-4	Assure that fire, hazardous substance regulation and emergency medical service problems are continuously identified and addressed in a proactive way, in order to optimize safety and efficiency.
CON/AQ-P-1	Comply with and promote San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) control measures regarding Reactive Organic Gases (ROG). Such measures are focused on: (a) steam driven well vents, (b) Pseudo-cyclic wells, (c) natural gas processing plant fugitives, (d) heavy oil test stations, (e) light oil production fugitives, (f) refinery pumps and compressors, and (g) vehicle inspection and maintenance.
CON/AQ-P-2	Encourage land uses and land use practices which do not contribute significantly to air quality degradation.
CON/AQ-P-5	Consider the location of sensitive receptors such as schools, hospitals, and housing developments when locating industrial uses to minimize the impact of industrial sources of air pollution.
CON/AQ-P-6	Participate in alternative fuel programs.
CON/AQ-P-7	Participate in regional air quality studies and comprehensive programs for air pollution reduction.
CON/AQ-P-8	Promote and assist in the development and implementation of the San Joaquin Valleywide Air Quality Study.
CON/AQ-P-9	Promote public education regarding air quality issues and alternative transportation.

SAF/PS-P-7 Enforce ordinances regulating the use/manufacture/sale/transport/ disposal of hazardous substances, and require compliance with state and federal laws regulating such substances.

SAF/PS-P-8 The Kern County and Incorporated Cities Hazardous Waste Management Plan and Final Environmental Impact Report serves as the policy document guiding all facets of hazardous waste.

THE ACCIDENT POTENTIAL FROM AIRCRAFT OVERFLIGHTS MAY IMPACT STRUCTURES AND INDIVIDUALS WITHIN THE FLIGHT PATTERN OF MEADOWS FIELD AIRPORT AND BAKERSFIELD AIRPARK.

Impact Analysis: As a result of buildout of the General Plan Update, structures and individuals within the vicinity of the Meadows Field Airport and the Bakersfield Airpark could be subjected to the potential of off-airport accidents. The Kern County Airport Land Use Compatibility Plan (ALUCP) has established Runway Protection (Zone A), Approach/Departure (Zone B1), Extended Approach/Departure (Zone B2), Common Traffic Pattern (Zone C) and Other Airport Environs (Zone C) Zones for the Meadows Field Airport and Bakersfield Airpark. These zone designations are identified by various levels of risk depending on proximity to runways and specify maximum land use densities and required amounts of open land. According to the ALUCP, Zones B1 and B2 present “substantial” and “significant” levels of risk, respectively. Within Zone C, land uses are subject to a “limited” level of risk. Additionally, a “negligible” level of risk is associated within Zone D. At both airports, residential and commercial/industrial uses occur within Zones B1, B2, C and D.

Development within each of the zones at these airports is regulated to ensure that land uses are not people intensive, as demonstrated by the City’s and County’s commitment to prohibiting new residential development in noise impact areas and avoiding excessively tall buildings or large concentrations of people in areas detrimental to the airport. The land use restrictions in the various zones provide the necessary limitations to reduce the potential impacts of off-airport accidents to persons and property on the ground. Specific land use regulations regarding FAA notification imaginary surfaces, aircraft noise and building heights have been implemented according to the ALUCP to reduce impacts due to aircraft overflight to a less than significant level.

The goals and policies, as stated below, would further reduce potentially significant impacts to public health and safety from aircraft overflight to less than significant levels.

Goals and Policies in the General Plan Update: The Safety and Circulation Elements include the following goals and policies:

SAF/PS-G-1 Ensure that the Bakersfield metropolitan area maintains a

high level of public safety for its citizenry.

CIR/AP-P-1 Maintain master plans for Meadows Field and Bakersfield Airpark.

CIR/AP-P-2 Ensure compatibility between the general plan, airport master plans and airport land use plans.

CIR/AP-P-3 Allow for the establishment of private airports and heliports/ helipads.

CIR/AP-P-4 Encourage and provide for the orderly development of public use airports within the Planning area and prevent the creation of new noise and safety impacts.

BUILDOUT OF METROPOLITAN BAKERSFIELD IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY RESULT IN AN INCREASE HAZARD ASSOCIATED WITH TRAIN OPERATIONS.

Impact Analysis: There are a number of safety issues that would typically face the general public and rail operators from daily rail operations. These issues include the potential for accidents between vehicles and trains at grade crossings and accidents involving pedestrians and trains. The established railroad right-of-way provides separation from the rail lines to existing and future land uses, thereby reducing the potential impact of a train derailment. Future structures constructed according to land uses designations would provide additional physical separation from rail lines.

Adherence with applicable Federal, State and local regulations related to carrier operation procedures would reduce the significance of potential impacts associated with rail operations. The goals and policies, as stated below, would further reduce potentially significant impacts to public health and safety from a derailment to less than significant levels.

Goals and Policies in the General Plan Update: The Safety Element and Circulation Element include the following goals and policies:

SAF/PS-G-1 Ensure that the Bakersfield metropolitan area maintains a high level of public safety for its citizenry.

SAF/PS-G-4 Assure that fire, hazardous substance regulation and emergency medical service problems are continuously identified and addressed in a proactive way, in order to optimize safety and efficiency.

CIR/TR-P-10 Work with AMTRAK to maintain and improve rail passenger service and facilities in Bakersfield.

CIR/TR-P-11 Work to provide grade separations at all arterial/railroad

crossings.

MINERAL AND ENERGY RESOURCES

GENERAL PLAN BUILDOUT MAY RESULT IN THE LOSS OF AVAILABILITY OF PETROLEUM, NATURAL GAS, SAND, AND/OR GRAVEL RESOURCES THAT WOULD BE OF VALUE TO THE METROPOLITAN BAKERSFIELD AREA AND CALIFORNIA RESIDENTS.

Impact Analysis: The General Plan Land Use Map designates a total of 24,168 acres within the Planning area as Mineral Petroleum (R-MP). Areas within this land use designation are minimum five-acre parcels that contain producing, or potentially productive, petroleum fields and mineral deposits. Also, this land use designation may be used in combination with other designations.[23]

The majority of the land within the R-MP category is located on the periphery of the developed areas. However, a comparative analysis of Figure V-3 of the 1990 General Plan and the Land Use Map indicates that other land use designations have been extended into previously established oil fields including industrial in the northern portion of the Planning area (i.e., Fruitvale Oil Field), and residential in the western portion of the Planning area (i.e., Rosedale, Bellevue and Canfield Ranch Oil Fields).

Implementation of the proposed General Plan Update is anticipated to result in both direct and indirect impacts upon continued resource recovery operations throughout the Planning area. A mineral resource of local and/or statewide value located in areas of current and potential resource extraction may be lost due to direct removal for development. The construction of buildings and infrastructure would permanently commit these sites to urbanization and potentially result in the creation of incompatible development on the property and ultimately the loss of access to oil/gas fields and sand/gravel extraction areas. As previously noted, the Planning area is a contributor to Kern County's ranking as the nation's leading petroleum- producing county. The Planning area also contributes to Kern County's status as the state's leading natural gas-producing county and the state's second largest sand/gravel producing county. Therefore, future development associated with Project implementation has the potential to result in the loss of valuable mineral resources possessing local and statewide importance.

The General Plan Update provides goals and policies that serve to mitigate the potential impacts to mineral resources as a result of buildout of Metropolitan Bakersfield. The General Plan also provides programs that serve to implement the goals and policies affecting mineral resources. These programs include: resource maps within and adjacent to the Planning Area which are to be utilized in the review of discretionary permits; mineral resource zoning areas are to be designated, acceptable interim land uses be determined and compatible land uses be planned around mineral extraction areas; and local zoning ordinances amended to accommodate mineral extraction uses outside of mineral resource

[23] Metropolitan Bakersfield General Plan Update, Land Use Element, page II-17.

zones be reviewed and updated periodically.

The Goals and Policies, as stated below, would reduce potentially significant mineral resources impacts to less than significant levels.

Goals and Policies in the General Plan Update: The Conservation Element contains the following goals and policies:

CON/MR-G-1	Protect areas of significant resource potential for future use.
CON/MR-G-2	Document areas of current mineral and energy resource extraction, as a basis for land use and conservation policies and programs.
CON/MR-G-3	Avoid conflicts between the productive use of mineral and energy resource lands and urban growth.
CON/MR-G-4	Protect land, water, air quality and visual resources from environmental damage resulting from mineral and energy resource development.
CON/MR-P-1	Maintain maps and descriptions of potential mineral and energy resources as a basis for policy and program implementation.
CON/MR-P-2	Document the location, status, and long-term viability of sand and gravel quarries and petroleum drilling sites for purposes of avoiding near and long-term land use conflicts and provide a basis for compliance monitoring.
CON/MR-P-3	Encourage and support the exchange of information on mineral and energy resources between private industry, City of Bakersfield and Kern County.
CON/MR-P-4	Land use decisions shall recognize the importance of identified mineral resources and need for conservation of resources identified by the State Mining and Geology Board.
CON/MR-P-5	Protect significant mineral and petroleum resource areas, including potential sand and gravel extraction areas.
CON/MR-P-6	Continue implementation of the Kern River Channel Maintenance Program for extraction of river sand and gravel.
CON/MR-P-7	Promote development of compatible uses adjacent to mineral extraction areas.
CON/MR-P-8	Allow development of resource extraction sites subject to the conditional use permit procedure in zones where such uses are not permitted by right and where it can be shown that

proposed extraction uses are compatible with surrounding uses.

CON/MR-P-9 Encourage preservation of any known deposits of gemstones and fossils.

CON/MR-P-10 Implement as appropriate the California Environmental Quality Act to minimize land use conflicts and reduce environmental impacts of all proposed resource extraction operations.

CON/MR-P-11 Prohibit incompatible development in areas which have a significant potential for harm to public health, safety and welfare due to mineral and petroleum extraction and processing.

CON/MR-P-12 Design resource extraction operations subject to discretionary permits to maintain the integrity of areas of “high environmental quality” and unique scenic value.

CON/MR-P-13 Require surface mineral resource extraction sites to have plans and procedures for land reclamation, conforming with the requirements of the State Mining and Geology Board, to be implemented upon completion of extraction operations at each site or portion thereof.

CON/MR-P-14 Review all discretionary mineral or petroleum development including renewal of existing authorizations, under the policies and procedures of the California Environmental Quality Act.

CON/MR-P-15 Require petroleum production sites in urban areas which are subject to discretionary permits, to install peripheral landscaping to help reduce the noise, dust and visual impacts to adjacent sensitive receptors and public ways.

CON/MR-P-16 Require all mineral development to be predicated on appropriate reclamation plans that meet the standards of the State Surface Mining and Reclamation Act and the implementing guidelines of the State Mines and Geology Board, and (or) the standards of the State Division of Oil and Gas. Reclamation/restoration of the sites shall be done as each phase of development or extraction is completed.

VI. FINDINGS REGARDING EFFECTS DETERMINED TO BE MITIGATED TO LESS THAN SIGNIFICANT LEVELS

The City and County of Kern having reviewed and considered the information contained of the Final EIR, the Technical Appendices and the administrative record, finds, pursuant to California Public Resources Code 21081 (a)(1) and CEQA Guidelines 15091 (a)(1) that changes or alterations have been required in, or incorporated into, the proposed project which would mitigate, avoid, or substantially lessen to below a level of significance the following potentially significant environmental effects identified of the Final EIR in the following categories: Aesthetics, Soils and Agricultural Resources, Hydrology and Drainage, Cultural Resources, Public Services and Facilities, and Public Health and Safety.

The potentially significant adverse environmental impacts that can be mitigated are listed below. The City and County of Kern finds that these potentially significant adverse impacts can be mitigated to a level that is considered less than significant after implementation of mitigation measures identified of the Final EIR.

AESTHETICS

CONSTRUCTION ACTIVITIES ASSOCIATED WITH IMPLEMENTATION OF THE GENERAL PLAN UPDATE MAY RESULT IN AESTHETIC/VISUAL QUALITY IMPACTS.

Impact Analysis: Construction associated with implementation of the General Plan Update may affect views in the vicinity of a construction site. Graded surfaces, construction debris, construction equipment and truck traffic may be visible. These impacts would be short-term and would cease upon project completion. All new development projects would be subject to environmental and design review on a site-specific, project-by-project basis to ensure visual aesthetic affects are limited to the extent possible. In addition, construction activities would be required to be consistent with municipal code requirements and conditions of approval. Therefore, since construction activities would be short-term and subject to site-specific requirements set forth by the City and/or County, aesthetic/visual impacts resulting from construction activities would be reduced to less than significant levels.

Goals and Policies in the General Plan Update: There are no applicable goals or policies regarding construction activities.

Mitigation Measure:

4.2-1 Construction effects shall be evaluated by the City of Bakersfield and/or County of Kern on a site-specific, project-by-project basis and subject to City and/or County standards and conditions of approval.

SOILS AND AGRICULTURAL RESOURCES

DEVELOPMENT IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY RESULT IN CHANGES TO THE EXISTING ENVIRONMENT WHICH, DUE TO THE LOCATION OR NATURE, COULD RESULT IN AFFECTS AND/OR CONVERSION OF FARMLAND.

Impact Analysis: The Planning area's forecasted growth is anticipated to result in the direct removal of a substantial amount of prime agricultural land from production. This direct conversion of farmland to non-agricultural uses is anticipated to result in secondary impacts upon agricultural operations located at the proposed urban-agricultural land use interface. Consequently, the secondary impacts are contributing factors in creating pressures for agricultural lands to convert to urban uses.

It is at the urban-agricultural land use interface locations where land use conflicts would have the potential to arise. The degree of conflict is relevant to the sensitivity of the proposed land use: the development of residential uses has the potential to result in greater land use compatibility issues than would the development of non-residential uses (i.e., industrial or commercial).

Existing farming operations may be adversely impacted by residential land uses. The development of new residential uses introduces people, animals, and vehicles into areas generally void of their presence. Consequently, adverse effects upon farming operations are introduced including citizen complaints, pests, disease and weeds, increased flooding and siltation, as well as increased traffic, vandalism/ trespassing, and theft. More specifically, farming operations may experience an increase in complaints regarding the adverse effects associated with noise and air quality from on-going agricultural operations. Residential landscaping and ornamental trees may harbor pests and diseases and function as vectors for pest and disease outbreaks potentially resulting in widespread crop damage. Farmlands located adjacent to heavily traveled roadways may experience trespassing, crop pilferage and damage to irrigation equipment. Additionally, high-value crops and farm equipment may become prime targets for theft by the encroaching urban population.

Conversely, the new residential land uses may experience adverse effects associated with noise and air quality from ongoing agricultural operations. More specifically, the new residents would experience noise from spraying, cultivating and harvesting equipment and the diesel engines associated with irrigation and typical tractor use. Dust generated by harvesting and other farming operations may pose a health hazard to adjacent residents since dust particles can cause various respiratory ailments. Also, the application of pesticides may extend beyond the target (i.e, farmland) contaminating adjacent residential areas.

Unlike the residential uses, industrial and commercial uses have the ability to operate in proximity to agricultural operations. Non-residential uses are not likely to experience adverse effects experienced by residential uses (i.e., noise and air quality from ongoing agricultural operations). However, existing farming

operations may experience adverse affects from industrial or commercial uses similar to those created by residential uses including increased traffic, vandalism/trespassing, and theft due to the introduction of people and vehicles into the area.

Because much agricultural land within the Planning area is found at the urban fringe, there exists a potential for conflicts between urban and agricultural uses as development at the urban fringe occurs. These potential conflicts may be especially troubling in the Planning area because the General Plan would not require new urban uses to be contiguous with other urban uses. The possibility clearly exists that small islands of urban development may arise, surrounded essentially be a sea of agricultural uses. Although the economic incentives for converting agricultural land will increase as the availability of necessary urban infrastructure increases, temporary and potentially long-term hazards and nuisances may result from urban areas being interspersed with agricultural uses.

Overall, the greater the activity occurring at the urban fringe, the greater the pressures for the urbanization of farmlands. Thus, forecasted growth may result in changes to the environment that would result in the conversion of farmland to a non-agricultural use. This potential impact would be most significant at locations where a considerable amount of new development is proposed at the urban fringe. This potential impact would be considered significant unless mitigated. The General Plan Update has identified goals and policies for the avoidance of conflicts between agricultural and non-agricultural uses. The goals and policies, along with the specified mitigation, would reduce this impact to a less than significant level.

Goals and Policies in the General Plan Update: The Land Use and Conservation Elements contain the following goals and policies:

LU-P-80	Assure that General Plan Amendment proposals for the conversion of designated agricultural lands to urban development occur in an orderly and logical manner giving full consideration to the effect on existing agricultural areas.
CON/SA-G-3	Establish urban development patterns and practices that promote soil conservation and that protect areas of agricultural production of food and fiber crops, and nursery products.
CON/SA-P-1	Determine the extent and location of all prime agricultural land within the study area.
CON/SA-P-2	Review projects that propose subdividing or urbanizing prime agricultural land to ascertain how continued commercial agricultural production in the project vicinity will be affected.
CON/SA-P-3	Protect areas designated for agricultural use, which include Class I and II agricultural soils having surface delivery water

systems, from the encroachment of residential and commercial subdivision development activities.

CON/SA-P-4 Monitor the amount of prime agricultural land taken out of production for urban uses or added within the plan area.

CON/SA-P-9 Protect prime agricultural lands against unplanned urban development by adopting agricultural zoning, agricultural land use designations, and by encouraging use of the Williamson Act and the Farmland Security Zone Program and policies that provide tax and economic incentives to ensure the long-term retention of agricultural lands.

CON/SA-P-10 Encourage landowners to retain their lands in agricultural production.

Mitigation Measures:

4.7-3 Future development which involves in-fill of the urban area as opposed to development on the urban fringes shall be encouraged.

4.7-4 Sensitive subdivision design of lands near or adjacent to agricultural areas shall be conducted with consideration given to the impacts of non-agricultural uses on agricultural uses.

4.7-5 To reduce the potential for conflicts between agricultural and non-agricultural uses. Sensitive subdivision design of lands near or adjacent to agricultural areas shall be conducted including provisions for buffer zones (i.e., a road, canal, wall, easement, or setback).

HYDROLOGY AND DRAINAGE

BUILDOUT OF THE PLANNING AREA IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY RESULT IN POTENTIAL FLOODING IMPACTS.

Impact Analysis: Some future development areas proposed for development may be situated within the 100-year floodplain, thus, possibly exposing people or structures to a significant risk involving flooding. Flood hazards are discussed in both the Safety and Land Use Elements of the proposed General Plan Update. The City of Bakersfield and County of Kern have identified flooding as a Key Safety Issue in the proposed Safety Element.

There are three basic areas of concern regarding flood control in the Planning area including the following: the development of evacuation procedures to reduce impacts in the event of a flood, maintenance of the Isabella Dam and Kern River levees, and development of flood control/retention basin facilities.

An important issue regarding flood control is the development of evacuation procedures in the event of a flood. Although there is a one percent chance that the 100-year floodplain will be exceeded in any given year, thus requiring evacuation procedures, these procedures are necessary to reduce impacts of flooding in the Planning area. Refer to Section 4.6, *Geologic and Seismic Hazards*, of the Final EIR, for a discussion of evacuation procedures.

The Kern River extends through the primary areas of development in the Planning area. As a result, the maintenance of adequate flood control facilities is a high priority. With the exception of the Lamont area (see discussion below), the Land Use Element does not propose development within the Kern River's 100-year floodplain. However, development is proposed directly adjacent to the floodplains boundary. Therefore, the maintenance of the channel's capacity through the Planning area is imperative to protect the safety of the residents. Overall, with the construction of Isabella Dam, hazards from a 100-year flood have been substantially reduced for the Oildale/Bakersfield Metropolitan area. [24] Nevertheless, new development within the 100-year floodplain would be required to be flood protected. The Plan's policies regarding the maintenance of the Kern River adequately protect the areas adjacent to the channel from the risk of flooding.

The greatest risk of flooding in the Planning area occurs south of Bakersfield in the Lamont/Arvin area. Factors attributed to this risk include the lack of flood control facilities along the Caliente Creek Channel such as dams and levees, and development within the existing floodplain. Whereas the Plan's Land Use Element does not allow for development along the Kern River floodplain, it does allow for development within the Caliente Creek floodplain including industrial, estate residential, single-family residential, and multi-family residential uses. The Caliente Creek floodplain is anticipated to continue to experience flooding until localized programs and facilities can be implemented.[25] The Plan recognizes this potential risk and recommends that measures be implemented to minimize flooding effects on Caliente Creek. In an effort to mitigate these potential flood hazards in the Lamont area, goals and policies have been identified in the Safety Element to regulate flood flow on Caliente Creek. More specifically, policies address the need for funding, planning, construction, and design of flood control measures on Caliente Creek. This policy adequately addresses the problem in the long-term, however, not in the short-term. As a result, mitigation has been specified below which addresses flood control/retention basin mitigation.

Specific goals and policies have been included in the General Plan Update to decrease potential flood hazards. Therefore, with implementation of the following policies and mitigation measures, impacts would be reduced to a less than significant level.

Goals and Policies in the General Plan Update: The Safety Element contains

[24] General Plan Update, Safety Element, Flooding, December 2001.

[25] Ibid.

the following goals and policies:

SAF/FL-G-1	Minimize hazards to planning area residents resulting from flooding.
SAF/FL-G-2	Reduce the risk of flooding to land uses.
SAF/FL-G-3	Maintain adequate flood flow capacity in the Kern River channel to prevent flooding from anticipated 100 year design flood flows.
SAF/FL-G-4	Regulate flood flow on Caliente Creek to mitigate flood hazard in the Lamont area.
PSF/GU-G-1	Maintain a coordinated planning and implementation program for the provision of public utilities to the Planning area.
SAF/FL-P-1	Develop specific standards which apply to development located in flood hazard areas, as defined by Federal Flood Insurance maps and most recent information as adopted by the responsible agency.
SAF/FL-P-2	Maintain adequate levees along the Kern River channel throughout the Planning area.
SAF/FL-P-3	Prevent urban development encroachment which would impede flood flows in the Kern River designated floodway.
SAF/FL-P-4	Remove sand and excessive plant growth from the Kern River channel as required to maintain channel capacity through the planning area.
SAF/FL-P-5	Develop a program or series of programs to control and reduce flooding in the Lamont area resulting from Caliente Creek.
CON/BR-P-2	Preserve areas of riparian vegetation and wildlife habitat within floodways along rivers and streams, in accordance with the Kern River Plan Element and channel maintenance programs designed to maintain flood flow discharge capacity.
CON/WR-P-8	Consider each proposal for water resource usage within the context of total Planning area needs and priorities--major incremental water transport, groundwater recharge, flood control, recreational needs, riparian habitat preservation and conservation.

Mitigation Measures:

4.8-1 Construct flood control retention basins to minimize flooding along Caliente Creek.

4.8-2 The County's Flood Prevention Program shall be implemented for new development in areas of flooding potential.

CULTURAL RESOURCES

IMPLEMENTATION OF THE GENERAL PLAN UPDATE MAY RESULT IN THE DEGRADATION OR LOSS OF HISTORIC, ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES.

Impact Analysis: The urban area is projected to expand upon buildout of the General Plan. The actual impact resulting from this expansion would depend on whether the proposed development occurs in areas of high, moderate or low archaeological sensitivities. Thus, potential impacts would be site-specific and an evaluation would be conducted on a project-by-project basis. It is anticipated, however, that a greater potential for impact would exist for development occurring in areas considered to have a high sensitivity (i.e., high probability) for resources. Conversely, development occurring in areas with low probability for archaeological resources would have a lesser potential for impacts.

A way of determining impacts to paleontological resources is to estimate the potential for discovery as a measure of likelihood that fossils would be discovered during excavations into a given rock unit. This potential is based on the past discovery of fossils from that rock unit. Paleontological potential does not measure the significance of individual fossils present within the Project area since it is impossible to accurately predict what individual fossils will be discovered. The possibility exists that older fossiliferous alluvium may be present six feet below the surface since the remains of Pleistocene (ice age) land animals have been collected from older alluvial deposits in Kern County. If excavations penetrate below six (6) feet, there is a "low to moderate potential" for the discovery of fossils. A "low to moderate potential" indicates that grading operations may expose fossils during development. These activities could destroy any fossils present. The destruction of such fossils could adversely impact the region's paleontological resources.

It should be noted that for each incremental development, site importance must be determined. Further, each incremental development would be required to comply with all applicable State and Federal regulations concerning preservation, salvage, or handling of cultural resources. It should be noted that the existing General Plan does not contain policies pertaining to cultural resources. However, in consideration of the State and Federal regulations, the policies specified in the Land Use Element, and the specified mitigation, potential impacts upon cultural resources would not be considered significant.

Goals and Policies in the General Plan Update: The Land Use Element contains the following goals and policies:

LU-P-5	Provide for streetscape improvements, landscape, and signage which uniquely identify major and/or historic residential neighborhoods.
LU-P-7	Provide for the retention of historic residential neighborhoods as identified in the Historical Resources Element if adopted by the City of Bakersfield.
LU-P-27	Require that new commercial uses maintain visual compatibility with single-family residences in areas designated for historic preservation.
LU-P-73	Promote the creation of both residential and commercial historic districts, and encourage the upgrading of historic structures.

Mitigation Measures:

4.10-1 As part of the environmental review procedure, an evaluation of the significance of paleontological, archaeological, and historical resources and the impact of proposed development on those resources shall be conducted and appropriate mitigation and monitoring included for development projects.

4.10-2 Development on land containing known archaeological resources (i.e., high sensitivity areas) shall utilize methodology set forth, as described necessary by a qualified archaeologist, to locate proposed structures, paving, landscaping, and fill dirt in such a way as to preserve these resources undamaged for future generations when it is the recommendation of a qualified archaeologist that said resources be preserved in situ.

4.10-3 The preservation of significant historical resources as identified on Table 4.10-1 shall be encouraged by developing and implementing incentives such as building and planning application permit fee waivers, Mills Act contracts, grants and loans, implementing the State Historic Building Code and other incentives as identified in the City's Historic Preservation Ordinance.

4.10-4 The preservation of significant historical resources shall be promoted and other public agencies or private organizations shall be encouraged to assist in the purchase and/or relocation of sites, buildings, and structures deemed to be of historical significance.

PUBLIC SERVICES AND FACILITIES

IMPLEMENTATION OF THE GENERAL PLAN UPDATE MAY RESULT IN

INCREASED DEMAND FOR THE SEWER SYSTEMS THAT SERVICE METROPOLITAN BAKERSFIELD.

Impact Analysis: As stated in the 1990 General Plan, daily sewer flows are as follows: 100 gallons per capita (residential); 0.010 cubic feet per second per gross acre. (commercial); and 0.105 cubic feet per second per gross acre. Additional major trunk sewers would be required to serve the projected amount of urban growth associated with the General Plan. It may be desirable, depending upon the timing with which growth actually occurs within Metropolitan Bakersfield, to consider the siting and construction of a new city treatment plant at a site west of Plant 3. The most desirable location of such a site, if required, can only be determined after actual growth patterns relative to trunk sewer system and Plant 3 become evident.

Urban growth in the northern, industrializing areas of Oildale is dependent upon NORSD plant expansion. Community growth to the southwest and south would not be constrained by sewage disposal assuming continued, appropriately timed, expansion of city wastewater treatment facilities. Currently, the City of Bakersfield anticipates that Plant No. 3 would be expanded in approximately 2008. Continued urban growth to the northeast would be dependent upon solutions to provide sewers either directly to Plant No. 2 or through the East Niles system.

As stated in the existing conditions and referenced above, although current treatment facilities are operating below capacity, existing facilities would need to be expanded to accommodate the additional amount of wastewater generated by future development.

The General Plan Update includes goals and policies that serve to mitigate the impacts to sewer services as a result of buildout of Metropolitan Bakersfield. General Plan implementation programs state that future urban development would be required to be serviced by centralized wastewater collection, treatment and disposal facilities, with the exception of residential development on one-acre parcels or larger. Periodic revisions of overall wastewater collection, treatment and disposal needs for the planning area, in accordance with growth projections and trends, would assure capacities at treatment facilities.

Of additional note, the Rosedale Specific Plan and Metropolitan Bakersfield General Plan have recently been amended to address specifications for County Service Area No. 71. All proposed development at a density greater than one dwelling unit per three gross acres, as well as all commercial and industrial developments, are required to be served by a regional sewage collection and treatment system, subject certain provisions.

In summary, the goals and policies, as stated below, would serve to reduce the significance of impacts to sewer services.

Goals and Policies in the General Plan Update: The Land Use, Conservation, and Public Services and Facilities Elements include the following goals and

policies:

LU-G-4	Accommodate new development which channels land uses in a phased, orderly, manner and is coordinated with the provision of infrastructure and public improvements.
PSF/SS-G-1	Ensure the provision of adequate sewer service to serve the needs of existing and planned development in the planning area.
PSF/SS-G-2	Provide for the resolution of jurisdictional sewer service planning differences to permit cost-effective sewer service.
PSF/SS-G-3	Provide trunk sewer availability to and treatment/disposal capacity for all metropolitan urban areas, to enable cessation or prevention of the use of septic tanks where such usage creates potential public health hazards or may impair groundwater quality, and to assist in the consolidation of sewerage systems. Provide sewer service for urban development regardless of jurisdiction.
LU-P-52	Locate new development where infrastructure is available or can be expanded to serve the proposed development.
LU-P-53	Ensure that land use and infrastructure development are coordinated.
LU-P-54	The developer shall be responsible for all on-site costs incurred as a result of the proposed project, in addition to a proportional share of off-site costs incurred in service extension or improvements. The availability of public or private services or resources shall be evaluated during discretionary project consideration. Availability may affect project approval or result in a reduction in size, density, or intensity otherwise indicated in the general plan's map provisions.
LU-P 79	Provide for an orderly outward expansion of new “urban” development (any commercial, industrial, and residential development having a density greater than one unit per acre) so that it maintains continuity of existing development, allows for the incremental expansion of infrastructure and public services, minimizes impacts on natural environmental resources, and provides a high quality environment for living and business.
LU-P-81	Allow for flexibility in the specific siting of multi-family residential and commercial uses from the locations generally

depicted on the Land Use Map in areas which are undeveloped, used for resource production, or are developed at very low densities through Planned Unit Development, Planned Commercial Developments and Specific Plans, provided that:

a) The overall density and distribution of land uses is maintained;
b) Multi-family and commercial uses are located in proximity to principal roadways, public transit, employment nodes, commercial services, and recreational uses and within 330 feet of the location depicted on the Land Use Policy Map;
c) Uses are sited to take advantage of pedestrian greenbelts, recreational amenities, and natural environmental resources;
d) The availability of infrastructure to the site or adjacent service areas is not adversely impacted.

LU-P-92 In the County, all residential developments that provide complete public infrastructure improvements including community water distribution and sewage collection and treatment systems may be permitted a density increase up to 20 percent. All land division activities shall be consistent with this provision.

PSF/SS-P-1 Effect the consolidated collection, treatment, and disposal of wastewater from all urban development within the metropolitan area, discouraging the creation or expansion of separate systems and encouraging the consolidation and interconnection of existing separate systems.

PSF/SS-P-2 Define benefit-related areas in which appropriate development fees will be assessed or assessment districts will be established to defray the costs of the wastewater collection, treatment and disposal facilities necessary to serve such areas.

PSF/SS-P-3 Consider utilization of capital improvement funds and assessment district monies to construct sewer trunk lines consistent with development timing.

CONS/SA-P-14 When considering proposal to convert designated agricultural lands to non-agricultural use, the decision making body of the city and County shall evaluate the following factors to determine the appropriateness of the proposal:

- Soil quality

- Availability of irrigation water
- Proximity to non-agricultural uses
- Proximity to intensive parcelization
- Effect on properties subject to "Williamson Act" land use contracts.
- Ability to be provided with urban services (sewer, water, roads, etc.)

Mitigation Measures: In addition to the goals, policies and implementation identified in the General Plan Update, the following mitigation measure has been identified to reduce potential impacts to less than significant levels.

4.11-1 Pursue the feasibility of the Kern County Environmental Health Services Department, Kern County Waste Management Department and/or City of Bakersfield Public Works Department creating a Wastewater Transport and Treatment Facilities Master Plan.

PUBLIC HEALTH AND SAFETY

BUILDOUT OF METROPOLITAN BAKERSFIELD IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY RESULT IN HUMAN HEALTH IMPACTS ASSOCIATED WITH EXPOSURE TO AGRICULTURAL CHEMICALS.

Impact Analysis: The General Plan Update does not specifically address the environmental risks to human health associated with exposure to agricultural chemicals. However, certain geographic areas anticipated for development by the General Plan Update are currently in agricultural use and as a result have the potential to contain concentrations of agricultural chemicals due to the long-term application of pesticides. General Plan land use categories which are currently in agricultural production areas include residential, commercial, as well as industrial uses.

Human health impacts may be caused by pesticide overspray, pesticide drift, inadvertent cropdusting of homes, and inhalation of pesticides by agricultural workers. However, according to the Kern County Health Department, it is unlikely that development in accordance with the General Plan Update would expose future residents to the affects of agricultural chemicals because of the short half-lives of currently used pesticides, and the fact that future developments would be hooked up to a central water supply which is monitored for contaminants. Nonetheless, potential risks may exist for development adjacent to agricultural land and estate residential uses that may use existing contaminated wells. Also, potential risks to construction workers may exist as a result of the inhalation of dust generated by grading activities.

The potential impact of the continued use of agricultural chemicals within development areas would be reduced to less than significant levels with implementation of the following established standards: 1) agricultural chemicals are required to be used and stored in accordance with all applicable Federal, State

and local regulations and guidelines; and 2) the use of buffers and barriers between agricultural and urban uses would provide a separation during pesticide application operations. These buffers or barriers can take the form of open space, roadways, utility corridors, canals, easements, masonry or landscape setbacks. Pursuant to Section 17.08.150(a) of the Bakersfield Municipal Code, residential structures are required to be setback a minimum of 50 feet from all agricultural zones.

Implementation of the General Plan Update may result in human health impacts as a result of exposure to agriculture chemicals. However, all new development projects would be subject to environmental and design review on a site-specific, project-by-project basis and would include a soils review to ensure human health affects are limited to the extent possible. Therefore, impacts would be reduced to less than significant levels with implementation of the specified mitigation.

Goals and Policies in the General Plan Update: The Safety Element includes the following goal:

SAF/PS-G-1 Ensure that the Bakersfield metropolitan area maintains a high level of public safety for its citizenry.

Mitigation Measures: In addition to the goals, policies and implementation measures identified in the General Plan Update, the following mitigation measures have been identified to reduce potential impacts to less than significant levels.

4.13-1 Where recommended by appropriate local, State or Federal agencies for discretionary projects, soils shall be tested for concentrations of agricultural chemicals prior to grading permit approval, whenever feasible. Contaminated soils shall be excavated and disposed of at a certified hazardous waste disposal facility whenever necessary.

4.13-2 Fugitive dust emissions shall be controlled through applicable requirements (Regulation VIII) set forth by the San Joaquin Valley Unified Air Pollution Control District, including but not limited to; irrigation, paving of construction roads, and limiting grading activities during periods of high wind. These practices would reduce potential adverse health effects resulting from the development of agricultural property.

4.13-3 Establish buffer zones adjacent to urban development proposals located adjacent to agricultural areas, as recommended by the Kern County Agricultural Commission.

BUILDOUT OF METROPOLITAN BAKERSFIELD IN ACCORDANCE WITH THE GENERAL PLAN UPDATE MAY RESULT IN HUMAN HEALTH IMPACTS ASSOCIATED WITH EXPOSURE TO FUNGUS SPORES WHICH CAUSE VALLEY FEVER.

Impact Analysis: The General Plan Update does not specifically address the

environmental risks to human health associated with exposure to fungus spores which cause Coccidioimycosis, commonly referred to as Valley Fever. Development in accordance with the General Plan Update could potentially expose the population to Valley Fever. Grading activities associated with development have the potential to release the fungus into the air, increasing the risk of infection to the surrounding population. Much of the population generated by increased development would likely be from areas outside the San Joaquin Valley and would be at greater risk of contracting the disease than current Metropolitan Bakersfield residents due to a relatively lower immunity.

Measures to reduce exposure to the fungus have had only limited success, due to the vastness of the area in which the fungus inhabits. However, paving roads, planting grass, and other measures that reduce dust where people live, work, or engage in recreation, have been shown to reduce the incidence of infection. Sufficient wetting of the soil prior to grading activities can also reduce exposure to airborne spores of the fungus.

Development in accordance with the General Plan Update could put future residents at a greater risk of exposure to Valley Fever; however, because fungus spores need to become airborne in order to enter the respiratory tract of humans, and landscaping, building pads, and streets associated with development would eliminate most fugitive dust, the threat is more serious for construction workers than for residents. New residents to the area are by nature at higher risk of being exposed to the disease for the reasons listed previously. As a result, measures should be taken to reduce the potential for exposure of the disease to future residents and construction workers. These include measures to control dust through irrigation, landscaping, and use of concrete, and prevention through public education.

Thus, implementation of the General Plan Update may result in human health impacts due to exposure to fungus spores which cause Valley Fever. However, impacts would be reduced to less than significant levels with implementation of the specified mitigation.

Goals and Policies in the General Plan Update: The Safety Element includes the following goal:

SAF/PS-G-1 Ensure that the Bakersfield metropolitan area maintains a high level of public safety for its citizenry.

Mitigation Measures: In addition to the goals and policies identified in the General Plan Update, the following mitigation measure have been identified to reduce potential impacts to less than significant levels.

4.13-4 Fugitive dust emissions shall be controlled through applicable requirements set forth by the San Joaquin Valley Unified Air Pollution Control District (Regulation VIII), including but not limited to; irrigation, paving of construction roads, and limiting grading activities during periods of high

wind. These practices would reduce potential adverse health effects as a result of exposure to Coccidioidomycosis.

DEVELOPMENT ALLOWED UNDER IMPLEMENTATION OF THE GENERAL PLAN UPDATE MAY EXPOSE PEOPLE TO EXISTING AREAS OF HAZARDOUS CONTAMINATION DURING CONSTRUCTION ACTIVITIES, DEPENDING ON THE SPECIFIC DEVELOPMENT SITE.

Impact Analysis: There are numerous sites within Metropolitan Bakersfield that are identified on one or more hazardous materials records list. Some of these sites may have contained or currently contain hazardous materials sources, such as leaking underground storage tanks. Hazardous materials releases from some of these sites may have affected soils and groundwater in Metropolitan Bakersfield. Releases that affect groundwater have the potential to migrate off each individual contamination site and onto adjacent properties and/or public right-of-way. Construction activities associated with development under the General Plan Update may adversely disturb soils or ground water containing hazardous concentrations of contaminates.

For those buildings to be removed as a result of the General Plan Update redevelopment which were constructed prior to 1978, the potential for asbestos containing material (ACM) and/or lead based paint to be-found on-site is likely. Demolition of these structures may produce solid waste containing asbestos and/or lead-based paint. Improper handling and disposal of asbestos and/or lead-based paint associated with demolition waste may pose a potential health risk to people.

Future projects resulting from development of the of the General Plan Update shall be required to comply with all applicable local, state and federal regulations and policies regarding hazardous materials. Required hazardous materials review may include additional analysis of hazardous materials records and/or preparation of an Environmental Site Assessment (ESA) to identify and document potential health risks as a result of the presence of hazardous materials in the vicinity of the site, in accordance with the American Society for Testing and Materials (ASTM) Standard Practice E 1527-94. In addition, the following General Plan Update goals, policies and mitigation measures would further reduce hazardous materials impacts to a less than significant level.

Goals and Policies in the General Plan Update: The Safety and Conservation Elements include the following goals and policies:

SAF/PS-G-1 Ensure that the Bakersfield metropolitan area maintains a high level of public safety for its citizenry.

SAF/PS-G-4 Assure that fire, hazardous substance regulation and emergency medical service problems are continuously identified and addressed in a proactive way, in order to optimize safety and efficiency.

SAF/PS-P-7 Enforce ordinances regulating the use/manufacture/sale/transport/ disposal of hazardous substances, and require compliance with state and federal laws regulating such substances.

SAF/PS-P-8 The Kern County and Incorporated Cities Hazardous Waste Management Plan and Final Environmental Impact Report serves as the policy document guiding all facets of hazardous waste.

Mitigation Measures: In addition to the goals and policies identified in the General Plan Update, the following mitigation measure has been identified to reduce potential impacts to less than significant levels.

4.13-4 All new discretionary development projects shall be subject to environmental and design review on a site-specific, project-by-project basis, including but not limited to, an assessment to determine whether hazardous materials present potential health affects to human health as required by the Department of Environmental Services.

VII. FINDINGS REGARDING INFEASIBILITY OF MITIGATION MEASURES FOR SIGNIFICANT IMPACTS

The City, having reviewed and considered the information contained of the Final EIR, Technical Appendices and the administrative record, finds, pursuant to California Public Resources Code 21081 (a)(3) and CEQA Guidelines 15091 (a)(3), that specific economic, legal, social, technological, or other considerations, make infeasible the mitigation measures identified of the Final EIR and, therefore, the Project will cause

significant unavoidable impacts in the categories of Traffic/Circulation, Air Quality, Noise, and Soils and Agricultural Resources.

TRAFFIC/CIRCULATION

IMPLEMENTATION OF THE GENERAL PLAN UPDATE WOULD RESULT IN AN INCREASE IN TRAFFIC VOLUMES FOR THE PLANNING HORIZON YEAR OF 2020, WHICH IN TURN WOULD IMPACT THE LEVELS OF SERVICE OF ROADWAYS WITHIN METROPOLITAN BAKERSFIELD.

Impact Analysis: Buildout in accordance with the General Plan would add significantly to Metropolitan Bakersfield's population and employment base. Developed areas of Metropolitan Bakersfield are anticipated to increase in land use intensity, and to a larger extent, geographic expansion of the city would occur. Major expansion areas include the southwest, northwest and northeast portions of Metropolitan Bakersfield. This would lead to an accompanying increase in travel. These increases would cause traffic volume to more than double in some areas. Daily vehicle trips would increase by 1.6 million to a total of 2.6 million.

Circulation Plan

A Circulation Plan has been devised to avoid the congestion that would result from buildout of the General Plan. Upgrades and extensions are planned for the freeway and arterial systems as described below. Exhibit 4.3-8, *Metropolitan Bakersfield General Plan Circulation Element*, shows the ultimate street system for Metropolitan Bakersfield. Right-of-way should be reserved whenever possible for the ultimate freeway system.

Seven new freeways are planned: the Crosstown Freeway, the Westside Parkway, the West Beltway, the South Beltway, the East Beltway, as well as a new alignment for SR-58. These future freeway corridors are shown conceptually in Exhibit 4.3-8. Specific Plan Lines must be adopted for the corridors which have not been adopted, to assist in right-of-way preservation. If permanent structures could be avoided within these corridors, future freeway construction would be simpler and less expensive.

The Crosstown Freeway (also called the Centennial Corridor) would extend from SR-178 near Baker Street, around the south side of downtown Bakersfield, to SR-99. The SR-178 Corridor Study, prepared jointly by KERN COG, the City of Bakersfield, and Caltrans, recommended this freeway alignment. This alignment was also recommended in the Bakersfield Systems Study conducted jointly by KERN COG, the City of Bakersfield, Kern County, and Caltrans.

The Westside Parkway is a continuation of the Crosstown Freeway extending westerly across SR-99 along the north side of the Kern River to I-5. The first phase of this freeway would only extend westerly to Stockdale Highway, west of Renfro Road. A Specific Plan Line has been adopted by City of Bakersfield and Kern County for this first phase. The remaining section to I-5 would be constructed in a

later phase. The alignment of the Westside Parkway was recommended in the Bakersfield System Study. The Crosstown Freeway and Westside Parkway would provide necessary capacity for east-west travel and relive congestion on SR-178 (24th Street corridor), SR-58 (Rosedale Highway), California Avenue, and other existing east-west routes.

The West Beltway would link SR-99 from north of Bakersfield with I-5 at the South Beltway, passing through the western portion of Metropolitan Bakersfield. The County has adopted portions of the alignment for the West Beltway as a Specific Plan Line. This freeway would provide a bypass and thus relief to SR-99 and provide an important link across the Kern River from southwest Bakersfield to the Westside Parkway.

The South Beltway extends from SR-58 around southeast Bakersfield to I-5 near SR-119 (Taft Highway). This corridor would aid local circulation as well as provide a bypass of SR-58 through the City for regional and interstate trips. A recommended corridor has been adopted by the City of Bakersfield and is shown in Exhibit 4.3-8. The County of Kern is studying this corridor as well as alternatives at this time. The alignment shown in Exhibit 4.3-8 is an alternative under consideration by the County.

The East Beltway is shown in Exhibit 4.3-8 in the area of Comanche Drive and connecting SR-178 to SR-58 (connecting to the South Beltway). This corridor has not been studied and may need to be lengthened to extend to an alternate south Beltway.

A new alignment of SR-58 has been recommended in the Bakersfield Systems Study and is shown in Exhibit 4.3-8. This corridor would extend northerly from existing SR-58 near Washington Avenue to the Union Pacific Railroad tracks then northwesterly to SR-99. It would then parallel SR-99 to north of Seventh Standard Road, then turn westerly to I-5. This corridor would provide congestion relief to SR-99 in central Bakersfield as well as provide a continuous SR-58 freeway corridor to I-5. Caltrans has not adopted this corridor at this time.

A new alignment for SR-178 is proposed from near future Vineland Road northeasterly to Rancheria Road. This corridor would provide a new route to the Lake Isabella area which would be more direct and wider than the existing road through the Kern River Canyon.

Upgrading existing freeways would also be necessary. This would include the widening of SR-178 from Fairfax Road to Alfred Harrell Highway and widening the existing road through the Kern River Canyon.

Upgrading existing freeways would also be necessary. This would include the widening of SR-178 from Fairfax Road to Alfred Harrell Highway and widening the existing SR-58 from SR-99 to Cottonwood Road. These improvements would eliminate areas of spot congestion.

Currently, plans are underway for several new arterials and arterial extensions. Generally, the plans call for widening of existing substandard arterials to the full 110 feet where possible with six travel lanes (four in unincorporated areas) and the extension of the arterial system into the new growth areas. In some areas, the newly-extended arterials would not need to have all four or six travel lanes constructed. The full right-of-way width should be reserved, however, to allow for future expansion. New arterial crossings of the Kern River are called for at Allen Road, Oak Street, Mohawk Road and Fairfax Road (to China Grade Loop). Arterials are generally spaced at one-mile intervals throughout the developed area except where topography or other unique features warrant a different pattern.

In accordance with the existing street patterns in Metropolitan Bakersfield, the Circulation Plan calls for collector streets (four travel lanes within 90 feet of right-of-way) in a grid pattern on mid-section lines. This pattern is deviated from where physical constraints are present, where collectors are not needed, or where existing development precludes the grid pattern of collector streets. The objective of the planned street system is to accommodate planned land development without traffic congestion. All new streets and freeways, with exceptions of the Downtown area, should operate at Level of Service C or better. For streets where the existing level of service is below “C”, new development projects on the affected streets must provide for appropriate mitigation so as to not further degrade the level of service.

2020 Traffic Model

In order to estimate the effect of future traffic on the roadway system, the Kern Council of Governments updated its traffic model to include the most recent data for long-range regional transportation patterns (2020) (refer to Exhibit 4.3-9, *Future 2020 Roadway System*, of the Final EIR). The traffic generated by a certain type of land use is estimated by applying a representative trip generation rate to the amount of that land use in the area under consideration. The traffic model uses a set of such trip generation rates to calculate Average Daily Trips (ADT) trips by land use. The roadway system used in the 2020 traffic model is shown in Exhibit 4.3-8. For traffic modeling purposes, the traffic analysis study area is divided into traffic analysis zones (TAZs), and the application of the trip generation rates to the land uses in each zone results in ADT for roadway segments. Note the traffic model does not assume the ultimate number of lanes for every roadway segment. The model assumes the number of lanes that would be constructed in accordance with the finances that are projected to be available up to 2020. The ADT results of the traffic model are displayed in Table 4.3-7, *2020 Volumes and Capacities – Freeways*, Table 4.3-8, 2020 *Volumes and Capacities – Expressways*, Table 4.3-9, *2020 Volumes and Capacities – Arterial Streets*, and Table 4.3-10, *2020 Volumes and Capacities – Collector Streets*, of the Final EIR. Additionally, traffic volumes are displayed in Exhibit 4.3-10, *2020 Daily Traffic Volumes*, of the Final EIR.

Roadway Capacities

ADT and volume-to-capacity ratios (V/C) for the General Plan Update traffic on all arterials and collectors in Metropolitan Bakersfield circulation system are provided in Table 4.3-9 and Table 4.3-10. As stated previously, all road segments with a V/C ratio greater than one contain traffic volumes that exceed the capacity of the roadway. As shown in Table 4.4-5, *2020 ADT Volumes and Capacity Analysis*, numerous roadway segments contain 2020 traffic volumes that exceed the roadway capacity.

Levels of Service

As shown on Table 4.3-8, Table 4.3-9, and Table 4.3-10, several roadway segments are operating at a LOS "D" or worse (V/C ratio > .80). Exhibit 4.3-11, *2020 Volume/Capacity Ratio*, shows the level of service for all expressways, arterial streets and collector streets in Metropolitan Bakersfield. The 2020 roadway system appears to have an outward growth pattern, with infill of urbanized areas. Generally, the roadway system can be broken down into for quadrants: northwest, northeast, southwest and southeast.

The northwest quadrant consists of the area that is north of SR-58 (Rosedale Highway) and west of SR-99. Growth of the circulation system in this quadrant is anticipated to occur outward from the City, and would include further infill of urbanized areas. Various segments are anticipated to be below performance criteria standards and/or exceed the roadway capacity. Examples of roadways that would contain deficiencies in the northwest quadrant are Santa Fe Highway (Olive Drive to SR-58) and Calloway Road (Brimhall Road to Stockdale Highway).

The northeast quadrant consists of the area north of SR-58 and east of SR-99, and includes the City Center and downtown area. Deficiencies would be found within the quadrant, including segments along the China Grade Loop (Round Mountain Road to Alfred Harrell Highway), Golden State Avenue (Chester Avenue to SR-178), Columbus Street (west of River Blvd.), California Avenue (Mohawk Street to Oak Street), Airport Drive (Norris Road to Olive Drive), and the merge areas extending from SR-99 to the downtown area.

The southwest quadrant consists of the area south of Rosedale Highway (SR-58) and west of SR-99. The southwest quadrant is anticipated to be a very high growth area in the near future. Roadways that would exhibit deficiencies in this quadrant would include Panama Lane (Old River Road to Gosford Road) and Gosford Road (Stockdale Highway to Ming Avenue).

The southeast quadrant consists of the area south of SR-58 and east of SR-99. The southeast quadrant would mostly maintain Levels of Service of "C" or better, with deficiencies of small segments in close proximity to the downtown area. Roadways that would have deficiencies include Cottonwood Avenue (Brundage Lane to Casa Loma Drive) and Panama Lane (Union Avenue to Cottonwood Road).

The downtown Bakersfield Redevelopment Area and small infill projects are

exempt based on the Level of Service Ordinance in order to facilitate infill projects and redevelopment. Furthermore, it is recognized that higher traffic levels are inherent to a vital central core.

In summary, the KERN COG traffic model for the year 2020 identifies numerous roadway segments that would exceed the level of service performance criteria established by the Metropolitan Bakersfield General Plan. Additionally, several roadway segments would have average daily traffic volumes that would exceed the roadway capacity. Although policies in the General Plan Update are intended to prevent streets and intersections from degrading below Level of Service "C" based upon future 2020 modeling, and standards, impacts are significant and unavoidable and no additional mitigation has been identified. Although this level of significance has been concluded, it is important to note that the General Plan Update to traffic and circulation achieves the City's objective which is to identify potential future potential future roadway deficiencies, in order to establish necessary capital improvement programming and traffic impact fee provisions to achieve the Level of Service standard.

Goals and Policies in the General Plan Update: The Circulation/Transit, Land Use and Conservation Elements contain the following goals and policies:

CIR/ST-G-1	Provide a safe and efficient street system that links all parts of the area for movement of people and goods.
CIR/ST-G-2	Provide for safe and efficient motorized, non-motorized, and pedestrian traffic movement.
CIR/ST-G-3	Minimize the impact of truck traffic on circulation, and on noise sensitive land uses.
CIR/ST-G-4	Provide a street system that creates a positive image of Bakersfield and contributes to residents' quality of life.
CIR/ST-G-5	Provide a system of freeways which maintains adequate travel times in and around the metropolitan area.
CIR/ST-G-6	Provide a local street network that contributes to the quality and safety of residential neighborhoods and commercial districts.
CIR/ST-G-7	Develop and maintain a circulation system that supports the land use plan shown in the general plan.
CIR/ST-P-1	Classify streets in the following manner:
	Freeways provide service to through traffic exclusively with no access to abutting property and no at-grade intersections.

Expressways are arterial highways with at least partial control of access which may or may not be divided or have grade separations at intersections and may be an interim facility for an ultimate freeway.

Arterials are used primarily by through traffic, with a minimal function to provide access to abutting property.

Collectors function to connect local streets with arterials and to provide access to abutting property.

Locals are exclusively for property access and through traffic is discouraged.

CIR/ST-P-2 Establish standards for the street system:

Facility Type	Lanes	Right-of-Way Width	Pavement Width	Curb Parking
Freeway/Expressway	210’ - 300' minimum *			No
Arterials on State Highway	6	110' - 130'	90' plus	No
Arterial w/bike lanes	6	110’	96’	No
** Arterial w/ bike lanes	4	110’	96’	Yes
Arterial w/o bike lanes	6	110’	90’	No
** Arterial w/o bike lanes	4	110’	90’	Yes
Collector w/ bike lane w/ 2-way left turn	4	90’	74’	No
Collector w/ bike lane	4	90’	74’	Yes
Collector w/o bike lane w/ 2-way left turn	4	90’	68’	No
Collector w/o bike lane	4	90’	68’	Yes
LOCAL STREET Commercial/Industrial	2	60’	44’	***
LOCAL STREET Residential Collector ****	2	60’	44’	Yes
LOCAL STREET Residential	2	60’	40’	Yes

Facility Type	Lanes	Right-of-Way Width	Pavement Width	Curb Parking
* Precise geometrics will be established through specific engineering studies. ** In incorporated areas, no parking is allowed along arterials within new development. In unincorporated areas, no parking zones will be determined by the traffic engineer. *** No parking zones will be determined by the traffic engineer. **** This local residential collector standard applies to local street where vehicular traffic is expected to exceed 750 vehicles per day or where its length exceeds one-half mile.				

CIR/ST-P-3 Provide additional right-of-way and pavement width to accommodate turn lanes at intersections.

CIR/ST-P-4 Provide additional right-of-way and pavement width at other locations for turn lanes, bus lanes, etc., as needed, based on engineering study.

CIR/ST-P-5 Place traffic signals to minimize vehicular delay.

CIR/ST-P-6 Design and locate site access driveways to minimize traffic disruption where possible considering items such as topography, past parcelization and other factors.

CIR/ST-P-7 Minimize direct and uncontrolled property access from arterials.

CIR/ST-P-8 Limit full access median breaks on arterials to a maximum of three per mile and include left-turn lanes at each.

CIR/ST-P-9 Consider the construction of grade separations for intersections unable to meet minimum level of service standards.

CIR/ST-P-10 Design local streets to conform to topography. Allow for deviation from “grid” system on local streets when they do not interfere with other traffic policies and traffic flows.

CIR/ST-P-11 Design local collector street systems to minimize through traffic movements and include short block lengths to discourage excessive speeds.

CIR/ST-P-12 Maintain the integrity of the circulation system.

CIR/ST-P-13 Continue designation and signage of specific streets as official truck routes, within incorporated areas.

CIR/ST-P-14	Provide continuous truck routes within incorporated areas that provide access to designated industrial areas.
CIR/ST-P-15	Prohibit trucks from non-truck routes within incorporated areas except as necessary for direct property access for pick-up and delivery.
CIR/ST-P-16	Require that truck access to commercial and industrial properties be designed to minimize impacts on adjacent residential parcels.
CIR/ST-P-17	Require buildings expected to be serviced by delivery trucks to provide off-street facilities for access and parking.
CIR/ST-P-18	Provide and maintain landscaping on both sides and in the median of arterial streets within incorporated areas. In unincorporated areas, landscaping within road right-of-way may be allowed and shall be limited to low shrubs; blank irrigation conduit only will be provided within the median of arterial streets.
CIR/ST-P-20	Prohibit parking on new arterials in incorporated areas. In unincorporated areas, prohibit parking when traffic studies warrant elimination. Allow parking on collectors and on residential streets.
CIR/ST-P-23	Provide freeways in a manner similar to that shown on the Circulation Plan Map. Actual alignments to be determined by specific corridor studies.
CIR/ST-P-24	Identify route alignments and right-of-way needs.
CIR/ST-P-25	Identify interchange locations and preliminary designs.
CIR/ST-P-26	Preserve freeway and interchange rights-of-way consistent with corridor study alignments and specifications.
CIR/ST-P-27	Work with Caltrans to have the freeways constructed.
CIR/ST-P-28	If no specific line has been adopted, future road reservations or other accommodations may be required to preserve freeway/ expressway alignments as shown on the circulation map.
CIR/ST-P-29	Upon the adoption of a specific plan line for a freeway/expressway alignment, developers will be required to make reservations of right-of-way preserving the alignment on any subdivision map. In addition, development restrictions

on general plan amendments, zone changes and the issuance of building permits will also be required.

CIR/ST-P-30 The need for a north/south freeway/expressway and an east-west freeway (178) are conceptually shown on the circulation map. Alternative alignments are under study and upon completion of corridor studies the actual alignment will be adopted and dedications or reservations of right-of-way may be required.

CIR/ST-P-31 Where existing street right-of-way is greater than necessary for desired purposes, dispose of surplus right-of-way in a manner consistent with state and local laws.

CIR/ST-P-32 Reserve or acquire right-of-way for all future transportation facilities in conformance with the Circulation Plan Map.

CIR/ST-P-33 Provide new transportation facilities as needed based on existing usage and future demand.

CIR/ST-P-34 Minimize the impacts of land use development on the circulation system. Review all development plans, rezoning applications, and proposed general plan amendments with respect to their impact on the transportation system, and require revisions as necessary.

CIR/ST-P-35 Require new development and expansion of existing development in incorporated areas to fully provide for on-site transportation facilities including streets, curbs, traffic control devices, etc. Within unincorporated areas street improvements will be determined by County Ordinance.

CIR/ST-P-36 Prevent streets and intersections from degrading below Level of Service “C” where possible due to physical constraints (as defined in a Level of Service standard) or when the existing Level of Service is below “C” prevent where possible further degradation due to new development or expansion of existing development with a three part mitigation program: adjacent right-of-way dedication, access improvements and/or an area-wide impact fee. The area-wide impact fee would be used where the physical changes for mitigation are not possible due to existing development and/or the mitigation measure is part of a larger project, such as freeways, which will be built at a later date.

CIR/ST-P-37 Require new development and expansion of existing development to pay for necessary access improvements, such as street extensions, widenings, turn lanes, signals, etc.,

as identified in the transportation impact report as may be required for a project.

CIR/ST-P-38 Exempt the downtown Bakersfield redevelopment area and small infill projects from the Level of Service standard to facilitate infill projects and downtown redevelopment and in recognition of the higher traffic levels inherent to a vital central core.

CIR/ST-P-39 Require new development and expansion of existing development to pay or participate in its pro rata share of the costs of expansions in area-wide transportation facilities and services which it necessitates.

CIR/ST-P-40 Provide new local street systems that are logical and comprehensible and systems of street names and addresses that are simple, consistent, and understandable.

CIR/ST-P-41 Plan alignments for local streets to permit economical and practical patterns, shapes, and sizes of development parcels.

LU-P-54 The developer shall be responsible for all on-site costs incurred as a result of the proposed project, in addition to a proportional share of off-site costs incurred in service extension or improvements. The availability of public or private services or resources shall be evaluated during discretionary project consideration. Availability may affect project approval or result in a reduction in size, density, or intensity otherwise indicated in the general plan's map provisions.

LU-P-56 Review and evaluate the land use designations of the plan on agreement of a final route alignment of the SR-178/58 Freeway, and any other future freeways, to ensure appropriate land use relationships, including:

a) Adequate setbacks, buffers, and/or restrictions on residential density to prevent noise impacts;

b) Potential for commercial services at principal off-ramps;

c) Potential for industrial uses which can benefit by close freeway proximity.

CON/AQ-P-10 Implement the Transportation System Management Program (July 1984) for Metropolitan Bakersfield to improve traffic flow, reduce vehicle trips, and increase street capacity.

CON/AQ-P-11 Improve the capacity of the existing road system through improved signalization, more right turn lanes, and traffic control systems.

CON/AQ-P-12 Encourage the use of mass transit, carpooling and other transportation options to reduce vehicle miles traveled.

CON/AQ-P-14 Establish park and ride facilities to encourage carpooling and the use of mass transit.

CON/AQ-P-15 Promote the use of bicycles by providing attractive bicycle paths and requiring provision of storage facilities in commercial and industrial projects.

CON/AQ-P-16 Cooperate with Golden Empire Transit and Kern Regional Transit to provide a comprehensive mass transit system for Bakersfield; require large-scale new development to provide related improvements, such as bus stop shelters and turnouts.

CON/AQ-P-18 Encourage walking for short distance trips through the creation of pedestrian friendly sidewalks and street crossings.

AIR QUALITY

CONSTRUCTION ACTIVITY ASSOCIATED WITH IMPLEMENTATION OF THE GENERAL PLAN WOULD RESULT IN AN INCREASE OF CRITERIA POLLUTANTS, AND WOULD VIOLATE AIR QUALITY STANDARDS.

Impact Analysis: Short-term air quality impacts would occur during the grading and construction activities related to buildout of the General Plan. Development associated with buildout includes new development, redevelopment and construction of infrastructure improvements. Temporary short-term impacts would include:

- Particulate (fugitive dust) emissions from demolition, clearing and grading activities;
- Off-site air pollutant emissions at the power plant serving the individual construction site, while temporary power lines are needed to operate construction equipment and provide lighting;
- Exhaust emissions and potential odors from construction equipment used on the construction site as well as the vehicles used to transport materials to and from the site;
- Exhaust emissions from the motor vehicles of the construction crew; and

- Potential release of asbestos from building demolition.

Fugitive Dust. Construction activities are a source of fugitive dust (PM10) emissions that may have a substantial, temporary impact on local air quality. In addition, fugitive dust may be a nuisance to those living and working in the vicinity of the individual construction site. Fugitive dust emissions are associated with land clearing, ground excavation, cut and fill operations, and truck travel on unpaved roadways. Dust emissions also vary substantially from day to day, depending on the level of activity, the specific operations, and weather conditions.

Fugitive dust from grading and construction activities at individual construction sites is expected to be short-term and cease upon completion of the individual project. Additionally, most of the emitted material is inert silicates, rather than the complex organic particulates released from combustion sources, which are more harmful to health. Dust (larger than 10 microns) generated by such activities usually becomes more of a local nuisance than a serious health problem. Of a particular health concern is the amount of PM10 (particulate matter smaller than 10 microns) generated as a part of fugitive dust emissions. As previously discussed, PM10 poses a serious health hazard alone or in combination with other pollutants. Control measures required and enforced by the APCD under Regulation VIII would help to minimize these short-term emissions to a less than significant level if a limited number of acres is disturbed at any one time (limited disturbed acre should be coordinated with the APCD for each individual construction site). The following three APCD Rules would apply to projects within the General Plan area:

Rule 8010: Fugitive dust administration requirement for control of PM 10;

Rule 8020: Fugitive dust requirement for control of PM10 from construction, demolition, excavation and extraction activities;

Rule 8070: Fugitive dust requirements for control of PM10 from vehicle and/or equipment parking, shipping, receiving, transfer, fueling, and serve areas one acre or larger.

In addition, individual construction projects within the Metropolitan Bakersfield would be subject to the following local zoning regulations:

- Water sprays or chemical suppressants must be used in all unpaved areas to control fugitive dust; and

- All access roads and parking areas must be covered with asphalt-concrete paving.

Compliance with San Joaquin Valley APCD Regulation VIII, the zoning ordinances, and General Plan goals and policies would typically reduce PM10 fugitive dust emissions for individual construction projects to a less than significant level. Larger or high intensity construction projects near sensitive receptors may

require mitigation beyond Regulation VIII.

Vehicle Exhaust Emissions. Exhaust emissions from construction include emissions associated with the transport of machinery and supplies to and from individual construction sites, emissions produced at the respective site as the equipment is used, and emissions from trucks transporting excavated materials from the site(s) and fill soils to the site(s). Emitted pollutants would include CO, ROG, NOX, SOX, and PM10.

The APCD separates construction emissions from operational emissions when determining significance. Construction projects that would emit more than the thresholds listed in Table 4.4-2 would normally be considered significant. Each construction project resulting from implementation of the General Plan Update would be required to implement control measures during construction activities in order to reduce the amount of emissions to below the significance thresholds, when possible. As previously stated, on typical projects, compliance with APCD Regulation VIII would mitigate fugitive dust emissions to less than significant levels; although large or high intensity construction projects near sensitive receptors may require mitigation beyond Regulation VIII (see GAMAQI Table 6-3).

The General Plan Update includes a Land Use Element. The intent of the Land Use Element is to establish policy direction for land use decisions within the Plan area for such issues as land use compatibility. Relevant goals and policies within this element addresses such construction-related impacts as regulatory compliance with appropriate air agencies and odor/dust control.

As previously stated, the Metropolitan Bakersfield portion of the Air Basin is designated as non-attainment for O3 (State and Federal standards) and PM10 (State and Federal standards). Any increase in these pollutants would create a significant and unavoidable impact. Thus, buildout in accordance with the Metropolitan Bakersfield General Plan would incrementally contribute pollutants to the basin, resulting in a significant and unavoidable impact that cannot be mitigated.

Goals and Policies in Proposed General Plan Update: The Air Quality Policies include the following:

CON/AQ-P-3 Require dust abatement measures during significant grading and construction operations.

Mitigation Measures: No mitigation measures beyond the policies identified in the General Plan Update, San Joaquin Valley APCD regulations, and the City of Bakersfield and County of Kern development regulations are available to reduce this impact to a less than significant level.

BUILDOUT OF THE GENERAL PLAN WOULD RESULT IN AN OVERALL INCREASE IN MOBILE AND STATIONARY SOURCE EMISSIONS WITHIN THE PLAN AREA WHICH WOULD EXCEED SAN JOAQUIN VALLEY AIR

DISTRICT AIR QUALITY STANDARDS.

Impact Analysis: The projected population increases in the Plan area would result in a corresponding increase in the number of automobiles and vehicular pollutants. The primary method of reducing pollutants that result either directly or indirectly from vehicular exhaust (including ozone), is to reduce both the number of vehicular trips and the miles traveled each day by local workers and residents. A large fraction of the remaining stationary area source pollutants (from electricity and gas consumption) can be reduced through energy conservation. In order to minimize the number of vehicle miles traveled (VMT), land uses could encourage the location of jobs, housing, and shopping areas in such a way as to minimize extra automobile trips. Reductions in vehicular trips as well as vehicular miles can be accomplished over time through the application of wise, long-range planning of land uses that provide comprehensive support for residents and workers, such as shopping and employment.

Mobile Sources. Table 4.4-3 *Mobile Source Emissions*, of the Final EIR, cites the amount of mobile source emissions expected at buildout under the General Plan. Mobile source emissions are the major source of air pollution in the Planning Area. At the source level (a single vehicle), mobile source emissions are expected to decrease during the next 20 years due to technological improvements to engine emission systems, alternative fuels and propulsion systems such as electric. Additionally, transportation demand management would play an increasingly important role. However, with implementation of appropriate policies and technological improvements during the next 20 years, mobile source emissions are still anticipated to increase, mainly due to the increase in population and vehicular activity.

Area Sources. Table 4.4-4, *Area Source Emissions*, of the Final EIR, cites the amount of stationary source emissions that are anticipated to result from buildout of the General Plan. Area source emissions would be generated due to an increased demand for electrical energy, which is generated from power plants utilizing fossil fuels. Area sources are sources that individually emit small quantities of air pollutants, but which cumulatively may represent significant quantities of emissions. Water heaters, fireplaces, wood heaters, lawn maintenance equipment and application of paints and lacquers are examples of area source emissions. Electric power generating plants are distributed throughout the Air Basin, and their emissions contribute to the total regional pollutant burden. The primary use of natural gas by the land uses throughout the Planning Area would be for combustion to produce space heating, water heating and other miscellaneous heating or air conditioning.

Air quality impacts would be regional and not confined to the Planning Area limits. The destination of motor vehicles, which are the primary contributors to air pollution, vary widely and cross many jurisdictional boundaries. Future site-specific development proposals would be evaluated for potential air emissions once development details have been designed and are available. Individual projects may not result in significant air quality emissions, although area-wide buildout under the General Plan would result in a significant air quality impact as explained below.

Air pollution impacts from implementation of the General Plan are considered significant because they would generate emissions of O3 (made up by ROC and NOX) and PM10 within an area designated as non-attainment for these pollutants. Goals and policies in the General Plan Update would reduce the significance of such impacts; however, the impacts would remain significant even after mitigation.

The Conservation/Air Quality, Circulation, and Safety Elements include goals and policies intended to minimize mobile and stationary source impacts. Goals and policies within the Conservation/Air Quality Element encourage pedestrian traffic, alternate forms of transportation, incentive programs and regulatory compliance. The Element also includes goals and policies that are aimed at reducing the amount of vehicular traffic and ensuring the compatible placement of land uses. The Circulation Element includes goals and policies to reduce trip time requirements and establish alternative transportation methods and systems thereby reducing traffic congestion and ensuring the provision of adequate transportation facilities. [26]

Local CO Concentrations: A primary mobile source pollutant of local concern is CO. Carbon monoxide is a direct function of vehicle idling time and, thus, traffic flow conditions. Carbon monoxide transport is extremely limited and it disperses rapidly with distance from the source, under normal meteorological conditions. Under certain extreme meteorological conditions, CO concentrations close to a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (residents, school children, hospital patients, the elderly, etc.). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of services (LOS). In areas with high ambient background CO concentrations, modeling of CO concentrations is recommended in determining an individual project's effect on local CO levels.

Existing CO concentrations in the Plan Area are low to moderate with the highest recorded eight-hour concentration of 7.67 ppm occurring in 1996 (State standard is 9 ppm), according to published data at the Bakersfield-Chester Street and California Avenue Monitoring Stations. Actual background CO concentrations in areas further from the urbanized Bakersfield area would likely be lower than those measured at the monitoring station.

Due to the fact that increased CO concentrations are usually associated with roadways that are congested and with heavy traffic volumes, the APCD has stated that preliminary screening can be used to determine with fair certainty whether a project would cause a potential CO hotspot. Therefore, the APCD has established that if neither of the following criteria are met at intersections affected by a developmental project, the project can be determined to have no potential to create a violation of the CO standard:

[26] The APCD's Guide for Assessing and Mitigating Air Quality Impacts, revised January 10, 2002, recommends mitigation measures by project type. Table 6-1 of this Guide lists those measures and is included in Appendix 15.4, *Air Quality Data*, of this EIR.

- A traffic study for a project indicates that the LOS on one or more streets or at one or more intersections in a project vicinity would be reduced to LOS E or F; or

- A traffic study indicates that a project would substantially worsen an already existing LOS F on one or more streets or at one or more intersections in a project vicinity.

If either of the above criteria can be associated with any intersection affected by a project, CO Protocol Analysis would be required to determine significance.

As previously stated, the General Plan Update would not change land use or related trip generation/distribution patterns beyond those anticipated in the current General Plan and associated environmental documentation. As such, the General Plan Update would not further reduce intersection LOS or substantially worsen an existing LOS on streets or intersections beyond the levels currently anticipated. As such, significant impacts related to CO concentrations would not occur as a result of the General Plan Update.

Goals and Policies in General Plan Update: The Air Quality, Circulation, and Safety Elements include the following goals and policies:

CON/AQ-G-1	Promote air quality that is compatible with health, well being, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants.
CON/AQ-G-2	Continue working toward attainment of Federal, State and local standards as enforced by the San Joaquin Valley Unified Air Pollution Control District.
CON/AQ-G-3	Reduce the amount of vehicular emissions in the planning area.
CON/AQ-G-4	Reduce air pollution associated with agricultural activities.
CIR/TR-G-4	Reduce traffic congestion and parking requirements and improve air quality through improved transportation services.
CON/MR-G-4	Protect land, water, air quality and visual resources from environmental damage resulting from mineral and energy resource development.
CON/AQ-P-1	Comply with and promote San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) control measures regarding Reactive Organic Gases (ROG). Such measures are focused on: (a) steam driven well vents, (b) Pseudo-cyclic wells, (c) natural gas processing plant fugitives, (d) heavy oil test stations, (e) light oil production fugitives, (f) refinery pumps and compressors, and (g) vehicle inspection and

maintenance.

CON/AQ-P-2 Encourage land uses and land use practices which do not contribute significantly to air quality degradation.

CON/AQ-P-4 Consider air pollution impacts when evaluating discretionary permits for land use proposals. Considerations should include:

a) Alternative access routes to reduce traffic congestion.

b) Development phasing to match road capacities.

c) Buffers including increase vegetation to increase emission dispersion and reduce impacts of gaseous or particulate matter on sensitive uses.

CON/AQ-P-5 Consider the location of sensitive receptors such as schools, hospitals, and housing developments when locating industrial uses to minimize the impact of industrial sources of air pollution.

CON/AQ-P-6 Participate in alternative fuel programs.

CON/AQ-P-7 Participate in regional air quality studies and comprehensive programs for air pollution reduction.

CON/AQ-P-8 Promote and assist in the development and implementation of the San Joaquin Valleywide Air Quality Study.

CON/AQ-P-9 Promote public education regarding air quality issues and alternative transportation.

CON/AQ-P-10 Implement the Transportation System Management Program (July 1984) for Metropolitan Bakersfield to improve traffic flow, reduce vehicle trips, and increase street capacity.

CON/AQ-P-11 Improve the capacity of the existing road system through improved signalization, more right turn lanes, and traffic control systems.

CON/AQ-P-12 Encourage the use of mass transit, carpooling and other transportation options to reduce vehicle miles traveled.

CON/AQ-P-13 Consider establishing priority parking areas for carpoolers in projects with relatively large numbers of employees to reduce vehicle miles traveled and improve air quality.

CON/AQ-P-14 Establish park and ride facilities to encourage carpooling and the use of mass transit.

CON/AQ-P-15 Promote the use of bicycles by providing attractive bicycle paths and requiring provision of storage facilities in commercial and industrial projects.

CON/AQ-P-16 Cooperate with Golden Empire Transit and Kern Regional Transit to provide a comprehensive mass transit system for Bakersfield; require large-scale new development to provide related improvements, such as bus stop shelters and turnouts.

CON/AQ-P-17 Continue to participate with the vehicle smog-check and maintenance programs.

CON/AQ-P-18 Encourage walking for short distance trips through the creation of pedestrian friendly sidewalks and street crossings.

CON/AQ-P-19 Promote a pattern of land uses which locates residential uses in close proximity to employment and commercial services to minimize vehicular travel.

CON/AQ-P-20 Provide the opportunity for the development of residential units in concert with commercial uses.

CON/AQ-P-21 Disperse urban service centers (libraries, post offices, social services, etc.) to minimize vehicle trips and trip miles traveled and concomitant air pollutants.

CON/AQ-P-22 Require the provision of secure, convenient bike storage racks at shopping centers, office buildings, and other places of employment in the Bakersfield Metropolitan area.

CON/AQ-P-23 Encourage the provision of shower and locker facilities by employers, for employees who bicycle or jog to work.

CON/AQ-P-24 Encourage employers to implement programs for staggered work hours, compressed work weeks, or other measures which relieve vehicle congestion during commute periods and reduce total work trips.

CON/AQ-P-25 Require design of parking structures and ramps to provide adequate off-street storage for entering vehicles to minimize on-street congestion and avoid internal back-up and idling of vehicles.

CON/AQ-P-26 Consider restriction or elimination of on-street parking for the

purpose of providing increased road or intersection capacity during peak traffic hours.

CON/AQ-P-27 Local governments should work with local transit authorities to increase the attractiveness of passenger staging areas through the provision of waiting shelters, landscaping and drinking fountains.

CON/AQ-P-28 Encourage the use of "teleconferencing" and other state-of-the-art technology as a means of reducing daily business related traffic.

CON/AQ-P-29 Encourage the use of alternative fuel and lower zero emission vehicles.

CON/AQ-P-30 Encourage local officials to advocate safe incentives for biomass plants to divert agricultural waste and reduce agricultural burns.

CON/AQ-P-31 Encourage agricultural burn alternatives.

SAF/PS-P-7 Enforce ordinances regulating the use/manufacture/sale/transport/ disposal of hazardous substances, and require compliance with state and federal laws regulating such substances.

Mitigation Measures: No mitigation measures beyond the goals, policies and implementation identified in the General Plan Update and San Joaquin Valley APCD regulations are available to reduce this impact to a less than significant level.

BUILDOUT OF THE GENERAL PLAN UPDATE MAY CONFLICT OR OBSTRUCT IMPLEMENTATION OF THE SAN JOAQUIN VALLEY APCD AIR QUAILTY ATTAINMENT PLAN.

Impact Analysis: The CCAA requires non-attainment districts with severe air quality problems to provide for a five percent reduction in non-attainment emissions per year (refer to discussion under Existing Conditions). The San Joaquin Valley Unified APCD prepared an AQAP for the San Joaquin Valley Air Basin in compliance with the requirements of the CCAA. The Plan requires best available retrofit technology on specific types of stationary sources to reduce emissions. The CCAA and the AQAP also identify TCMs as methods of reducing emissions from mobile sources. The CCAA defines TCMs as, "any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling or traffic congestion for the purpose of reducing motor vehicle emission." The AQAP for the Air Basin identifies the provision to accommodate the use of bicycles, public transportation and traffic flow improvements as TCMs.

As indicated in the goals and policies included in the General Plan Update, the City is actively pursuing and implementing programs that reduce air pollutant emissions. However, the General Plan Update is considered growth inducing, both directly and indirectly, although not to a greater extent than the 1990 General Plan. Since the General Plan Update is considered growth inducing and as buildout of the General Plan would generate significant and unavoidable emissions of O_3 and PM_{10} (the Basin is designated as non-attainment for both of these pollutants), the General Plan Update can be considered inconsistent with the APCD's AQAP.

Goals and policies within the Air Quality Element encourage cooperation with the San Joaquin Valley Unified Air Pollution Control District. The Circulation Element encourages cooperation with County and regional agencies through participation in various transportation programs. Based on the fact that air quality is closely related to transportation, implementation of these policies would set the foundation for emission reduction although not reduce emissions to less than significant levels.

Goals and Policies in General Plan Update: The Air Quality and Circulation Elements include the following goals and policies:

CON/AQ-G-1 Promote air quality that is compatible with health, well being, and enjoyment of life by controlling point sources and minimizing vehicular trips to reduce air pollutants.

CON/AQ-G-2 Continue working toward attainment of Federal, State and Local standards as enforced by the San Joaquin Valley Unified Air Pollution Control District.

CIR/TR-G-4 Reduce traffic congestion and parking requirements and improve air quality through improved transportation services.

CON/AQ-P-1 Comply with and promote San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) control measures regarding Reactive Organic Gases (ROG). Such measures are focused on: (a) steam driven well vents, (b) Pseudo-cyclic wells, (c) natural gas processing plant fugitives, (d) heavy oil test stations, (e) light oil production fugitives, (f) refinery pumps and compressors, and (g) vehicle inspection and maintenance.

CON/AQ-P-2 Encourage land uses and land use practices which do not contribute significantly to air quality degradation.

CON/AQ-P-4 Consider air pollution impacts when evaluating discretionary permits for land use proposals. Considerations should include:

a) Alternative access routes to reduce traffic congestion.

c) Development phasing to match road capacities.

d) Buffers including increase vegetation to increase emission dispersion and reduce impacts of gaseous or particulate matter on sensitive uses.

CON/AQ-P-7 Participate in regional air quality studies and comprehensive programs for air pollution reduction.

CON/AQ-P-10 Implement the Transportation System Management Program (July 1984) for Metropolitan Bakersfield to improve traffic flow, reduce vehicle trips, and increase street capacity.

CON/AQ-P-11 Improve the capacity of the existing road system through improved signalization, more right turn lanes, and traffic control systems.

CON/AQ-P-12 Encourage the use of mass transit, carpooling and other transportation options to reduce vehicle miles traveled.

CON/AQ-P-13 Consider establishing priority parking areas for carpoolers in projects with relatively large numbers of employees to reduce vehicle miles traveled and improve air quality.

CON/AQ-P-14 Establish park and ride facilities to encourage carpooling and the use of mass transit.

CON/AQ-P-15 Promote the use of bicycles by providing attractive bicycle paths and requiring provision of storage facilities in commercial and industrial projects.

CON/AQ-P-16 Cooperate with Golden Empire Transit and Kern Regional Transit to provide a comprehensive mass transit system for Bakersfield; require large-scale new development to provide related improvements, such as bus stop shelters and turnouts.

CON/AQ-P-20 Provide the opportunity for the development of residential units in concert with commercial uses.

CON/AQ-P-21 Disperse urban service centers (libraries, post offices, social services, etc.) to minimize vehicle trips and trip miles traveled and concomitant air pollutants.

CON/AQ-P-22 Require the provision of secure, convenient bike storage racks at shopping centers, office buildings, and other places of employment in the Bakersfield Metropolitan Area.

CON/AQ-P-23 Encourage the provision of shower and locker facilities by

employers, for employees who bicycle or jog to work.

CON/AQ-P-24 Encourage employers to implement programs for staggered work hours, compressed work weeks, or other measures which relieve vehicle congestion during commute periods and reduce total work trips.

CON/AQ-P-27 Local governments should work with local transit authorities to increase the attractiveness of passenger staging areas through the provision of waiting shelters, landscaping and drinking fountains.

CON/AQ-P-28 Encourage the use of "teleconferencing" and other state-of-the-art technology as a means of reducing daily business related traffic.

CON/AQ-P-29 Encourage the use of alternative fuel and low or zero emission vehicles.

CON/AQ-P-30 Encourage local officials to advocate safe incentives for biomass plants to divert agricultural waste and reduce agricultural burns.

CON/AQ-P-31 Encourage agricultural burn alternatives.

Mitigation Measures: No mitigation measures beyond the goals, policies and implementation identified in the General Plan Update and San Joaquin Valley APCD regulations are available to reduce this impact to a less than significant level.

NOISE

FUTURE TRAFFIC NOISE LEVELS ASSOCIATED WITH IMPLEMENTATION OF GENERAL PLAN UPDATE WOULD CONTRIBUTE TO AN EXCEEDANCE OF NOISE STANDARDS RESULTING IN POTENTIAL NOISE IMPACTS TO SENSITIVE RECEPTORS.

Impact Analysis: Noise levels adjacent to SR-99, SR-58, SR-178, highways/ expressways and surface street links were modeled for the year 2020 to determine the location and extent of existing and future vehicular generated noise conditions. Table 15.5-1 (Appendix), *Exterior Noise Exposure Adjacent to Nearby Roadways, 2020, (Freeways)*, of the Final EIR, indicates SR-99 and SR-178 would generate noise levels at a distance of 100 feet from centerline that would exceed the 75 CNEL. All of the identified roadways on Table 15.5-1, including SR-99, Westside Parkway, Crosstown Freeway, SR-58, Highway 178 and Golden State Avenue, would generate noise levels between 70 and 75 CNEL.

Table 4.5-11, *Noise Impact Locations (Existing Roadways)*, of the Final EIR, shows existing roadways that would be impacted by noise from future (2020) traffic volumes. As indicated on Table 4.5-11, freeway noise would increase by approximately one to four dBA, with the exception of SR-178 (Oswell to Fairfax Road), which would incur a noise increase of approximately 6.52 dBA. Alfred Harrell Expressway would experience a noise increase of approximately 5 to 12 dBA. Numerous arterial streets (120 roadway segments) would also incur increases in noise levels. The arterial streets that would have the largest increases in noise levels include: SR-58, Pacheco Road, Coffee Road, Fairfax Road, Buena Vista Road, Allen Road and Q Street. Each of these roadways would have roadway segments that would experience an increase in noise levels greater than 8 dBA. The greatest amount of noise increase would occur on Pacheco Road, between Old River Road and Gosford Road.

Table 4.5-12, *Noise Impact Locations (Future Roadways)*, of the Final EIR, cites the impact location, existing noise level and anticipated level of increase for these areas. As indicated on Table 4.5-12, the Westside Parkway and Crosstown Freeway would both have noise levels that would exceed 65 dBA. Also shown are numerous arterial streets that would exceed the 65 dBA. However, no future collector streets would exceed 65 dBA.

Based on Table 4.5-11 and 4.5-12, existing sensitive land uses, primarily residential areas, may be exposed to increased noise levels due to traffic increases. Due to the fact that development between years 2000 and 2020 would exacerbate a current exceedence of CNEL noise standards along several roadways modeled adjacent to sensitive land uses, significant noise impacts would occur. The General Plan Update provides goals and policies that are intended to reduce the severity of noise levels associated with vehicular traffic as a result of buildout of Metropolitan Bakersfield. The General Plan Update includes implementation measures which address traffic noise in Metropolitan Bakersfield. Implementation programs include review of proposed development plans to ensure compliance with City and County noise control standards. However, it is concluded that goals, policies and associated implementation cited in the General Plan Update would not reduce noise impacts to less than significant levels. No feasible mitigation measures have been identified to reduce the significance of impacts. Thus, significant and unavoidable noise impacts are concluded to occur with buildout in accordance with the General Plan.

Goals and Policies in the General Plan Update: The Noise, Land Use and Circulation Elements include the following goals and policies:

NOI-G-1 Ensure that residents of the Bakersfield Metropolitan Area are protected from excessive noise and existing moderate levels of noise are maintained.

NOI-G-2 Protect the citizens of the Planning area from the harmful effects of exposure to excessive noise, and protect the economic base of the area by preventing the encroachment of

incompatible land uses near known noise-producing roadways, industries, railroads, airports and other sources.

NOI-P-1 Identify noise-impact areas exposed to existing or projected noise levels exceeding 65 dB CNEL (exterior) or the performance standards described in Table VII-4 (General Plan Update). The noise exposure contour maps on file at the City of Bakersfield and County of Kern indicate areas where existing and projected noise exposures exceed 65 dB CNEL (exterior) for the major noise sources identified.

NOI-P-2 Prohibit new noise-sensitive land uses in noise-impacted areas unless effective mitigation measures are incorporated into project design to acceptable levels.

NOI-P-3 Review discretionary industrial, commercial or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will be reviewed if resulting noise levels will exceed the performance standards contained within Table VII-4 in areas containing residential or other noise-sensitive land uses.

NOI-P-4 Require noise level criteria applied to land uses other than residential or other noise-sensitive uses to be consistent with the recommendations of the California Office of Noise Control (see Figure VII-3).

NOI-P-5 Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.

NOI-P-6 Encourage interjurisdictional coordination and cooperation with regard to noise impact issues.

NOI-P-7 Establish threshold standards for the determination of the existence of cumulative noise impacts that are significant, and will therefore require mitigation to achieve acceptable noise standards that do not exceed the standards contained in this element.

LU-P-54 The developer shall be responsible for all on-site costs incurred as a result of the proposed project, in addition to a proportional share of off-site costs incurred in service extension or improvements. The availability of public or private services or resources shall be evaluated during discretionary project consideration. Availability may affect

project approval or result in a reduction in size, density, or intensity otherwise indicated in the general plan's map provisions.

LU-P-55 Provide for the mitigation of significant noise impacts on adjacent sensitive uses from transportation corridor improvements.

LU-P-56 Review and evaluate the land use designations of the plan on agreement of a final route alignment of the Route 178/58 Freeway, and any other future freeways, to ensure appropriate land use relationships, including:

a) Adequate setbacks, buffers, and/or restrictions on residential density to prevent noise impacts;

b) Potential for commercial services at principal off-ramps;

d) Potential for industrial uses which can benefit by close freeway proximity.

CIR/ST-G-3 Minimize the impact of truck traffic on circulation, and on noise sensitive land uses.

Mitigation Measures: No mitigation measures beyond the goals, policies and implementation measures identified in the General Plan Update are available to reduce this impact to a less than significant level.

FUTURE OPERATION OF RAILWAYS WOULD BE A SIGNIFICANT NOISE SOURCE TO LAND USES LOCATED IN METROPOLITAN BAKERSFIELD.

Impact Analysis: As previously stated, Metropolitan Bakersfield is traversed by two freight train lines: Burlington Northern-Santa Fe Railway (BNSE) and Southern Pacific Transportation Company (SPTCo). In addition to the freight train lines, Amtrak provides rail service to and from Bakersfield and the Central Valley cities to the north. Railroad noise contours are on file at the City of Bakersfield Planning Department. Railroad noise contours should be considered as estimates of worst-case exposure since no adjustments have been made for shielding provided by intervening topography or buildings. Train traffic on rail lines is considered to contribute to a relatively minor source of noise within the community due to the low frequency of operation. Although noise levels from individual train movements on railways produce short term noise impacts when they occur, such impacts do not occur frequently enough to produce a significant noise exposure as defined by CNEL. In summary, implementation of the General Plan Update goals and policies, as stated below, would ensure that noise impacts associated with the operation of railways would remain less than significant under future conditions.

Goals and policies in the General Plan Update: The Noise Element includes the following goals and polices:

NOI-G-1 Ensure that residents of the Bakersfield Metropolitan Area are protected from excessive noise and existing moderate levels of noise are maintained.

NOI-G-2 Protect the citizens of the Planning area from the harmful effects of exposure to excessive noise, and protect the economic base of the area by preventing the encroachment of incompatible land uses near known noise-producing roadways, industries, railroads, airports and other sources.

NOI-P-1 Identify noise-impact areas exposed to existing or projected noise levels exceeding 65 dB CNEL (exterior) or the performance standards described in Table VII-4. The noise exposure contour maps on file at the City of Bakersfield and County of Kern indicate areas where existing and projected noise exposures exceed 65 dB CNEL (exterior) for the major noise sources identified.

NOI-P-2 Prohibit new noise-sensitive land uses in noise-impacted areas unless effective mitigation measures are incorporated into project design to acceptable levels.

NOI-P-3 Review discretionary industrial, commercial or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will be reviewed if resulting noise levels will exceed the performance standards contained within Table VII-4 in areas containing residential or other noise-sensitive land uses.

NOI-P-4 Require noise level criteria applied to land uses other than residential or other noise-sensitive uses to be consistent with the recommendations of the California Office of Noise Control (see Figure VII-3).

NOI-P-5 Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.

NOI-P-6 Encourage interjurisdictional coordination and cooperation with regard to noise impact issues.

NOI-P-7 Establish threshold standards for the determination of the existence of cumulative noise impacts that are significant, and

will therefore require mitigation to achieve acceptable noise standards that do not exceed the standards contained in this element.

Mitigation Measures: No mitigation measures beyond the goals, policies and implementation measures identified in the General Plan Update are proposed.

FUTURE OPERATION OF THE BAKERSFIELD MUNICIPAL AIRPORT AND MEADOWS FIELD AIRPORT COULD BE A SIGNIFICANT NOISE SOURCE TO LAND USES LOCATED IN METROPOLITAN BAKERSFIELD.

Impact Analysis: As indicated in the Airport Land Use Compatibility Plan (ALUCP) for Kern County, the land uses within the 65 CNEL noise contour line for the Bakersfield Municipal Airport are designated for public facility and/or commercial/industrial uses. Land use designations within the 60 CNEL noise contour line primarily include public facility uses and commercial/industrial uses. A very small portion of land, on the southeast corner of E. Pacheco Road and Sparks Street, is designated for medium density residential uses and is located within the 60 CNEL noise contour. Similarly, in accordance with the AELUP, the land uses within the 65 CNEL noise contour line for the Meadows Field Airport are designated for public facility uses and/or commercial/industrial uses. A small portion of land on the east side of the intersection of Airport Drive and Norris Road, is designated for residential uses and is located within the 60 CNEL noise contour.

While aircraft activity at both airports, Meadows Field and Bakersfield Municipal Airport, are anticipated to increase, future aircraft operations would be required to comply with the provisions set forth in the AELUP. Additionally, master plans for each airport have been developed that will guide future development and operations at the airport sites. The master plans would account for noise impacts created by expansion of facilities and increased activity at the airports. Implementation of goals and policies in the General Plan Update, as stated below, would ensure that noise impacts associated with Meadows Field and Bakersfield Municipal Airport operations would remain less than significant under future conditions.

Goals and Policies in the General Plan Update: The Noise and Circulation Elements include the following goals and policies:

NOI-G-1 Ensure that residents of the Bakersfield Metropolitan Area are protected from excessive noise and existing moderate levels of noise are maintained.

NOI-G-2 Protect the citizens of the Planning area from the harmful effects of exposure to excessive noise, and protect the economic base of the area by preventing the encroachment of incompatible land uses near known noise-producing roadways, industries, railroads, airports and other sources.

NOI-P-1	Identify noise-impact areas exposed to existing or projected noise levels exceeding 65 dB CNEL (exterior) or the performance standards described in Table VII-4. The noise exposure contour maps on file at the City of Bakersfield and County of Kern indicate areas where existing and projected noise exposures exceed 65 dB CNEL (exterior) for the major noise sources identified.
NOI-P-2	Prohibit new noise-sensitive land uses in noise-impacted areas unless effective mitigation measures are incorporated into project design to acceptable levels.
NOI-P-3	Review discretionary industrial, commercial or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will be reviewed if resulting noise levels will exceed the performance standards contained within Table VII-4 in areas containing residential or other noise-sensitive land uses.
NOI-P-4	Require noise level criteria applied to land uses other than residential or other noise-sensitive uses to be consistent with the recommendations of the California Office of Noise Control (see Figure VII-3).
NOI-P-5	Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.
NOI-P-6	Encourage interjurisdictional coordination and cooperation with regard to noise impact issues.
NOI-P-7	Establish threshold standards for the determination of the existence of cumulative noise impacts that are significant, and will therefore require mitigation to achieve acceptable noise standards that do not exceed the standards contained in this element.
CIR/AP-P-4	Encourage and provide for the orderly development of public use airports within the Planning area and prevent the creation of new noise and safety impacts.

Mitigation Measures: No mitigation measures beyond the goals, policies and policies and implementation measures identified in the General Plan Update have been proposed.

STATIONARY NOISE SOURCES WITHIN METROPOLITAN BAKERSFIELD

MAY IMPACT ADJACENT LAND USES.

Impact Analysis: A variety of stationary noise sources are located throughout Metropolitan Bakersfield, primarily consisting of commercial and industrial mechanical equipment, air conditioning units, compressors and similar equipment. This equipment is typically fitted with noise muffling devices. In addition, as part of the City/County approval for any land use involving such stationary noise sources, the City/County requires an acoustic study to demonstrate that the stationary noise source would not exceed Noise Ordinance limits at the adjacent property line. The General Plan Update includes implementation which address stationary source noise in Metropolitan Bakersfield. Implementation programs include review of proposed development plans to ensure compliance with City and County noise control standards. Thus, implementation of goals, policies and implementation in the General Plan Update would serve to ensure that stationary noise impacts are reduced to less than significant levels.

Goals and Policies in the General Plan Update: The Noise, Land Use and Circulation Elements include the following goals and policies:

NOI-G-1 Ensure that residents of the Bakersfield Metropolitan Area are protected from excessive noise and existing moderate levels of noise are maintained.

NOI-G-2 Protect the citizens of the Planning area from the harmful effects of exposure to excessive noise, and protect the economic base of the area by preventing the encroachment of incompatible land uses near known noise-producing roadways, industries, railroads, airports and other sources.

NOI-P-1 Identify noise-impact areas exposed to existing or projected noise levels exceeding 65 dB CNEL (exterior) or the performance standards described in Table VII-4. The noise exposure contour maps on file at the City of Bakersfield and County of Kern indicate areas where existing and projected noise exposures exceed 65 dB CNEL (exterior) for the major noise sources identified.

NOI-P-2 Prohibit new noise-sensitive land uses in noise-impacted areas unless effective mitigation measures are incorporated into project design to acceptable levels.

NOI-P-3 Review discretionary industrial, commercial or other noise-generating land use projects for compatibility with nearby noise-sensitive land uses. Additionally, the development of new noise-generating land uses which are not preempted from local noise regulation will be reviewed if resulting noise levels will exceed the performance standards

contained within Table VII-4 in areas containing residential or other noise-sensitive land uses.

NOI-P-4 Require noise level criteria applied to land uses other than residential or other noise-sensitive uses to be consistent with the recommendations of the California Office of Noise Control (see Figure VII-3).

NOI-P-5 Encourage vegetation and landscaping along roadways and adjacent to other noise sources in order to increase absorption of noise.

NOI-P-6 Encourage interjurisdictional coordination and cooperation with regard to noise impact issues.

NOI-P-7 Establish threshold standards for the determination of the existence of cumulative noise impacts that are significant, and will therefore require mitigation to achieve acceptable noise standards that do not exceed the standards contained in this element.

LU-P-54 The developer shall be responsible for all on-site costs incurred as a result of the proposed project, in addition to a proportional share of off-site costs incurred in service extension or improvements. The availability of public or private services or resources shall be evaluated during discretionary project consideration. Availability may affect project approval or result in a reduction in size, density, or intensity otherwise indicated in the general plan's map provisions.

CIR/ST-P-16 Require that truck access to commercial and industrial properties be designed to minimize impacts on adjacent residential parcels.

SOILS AND AGRICULTURAL RESOURCES

PLAN IMPLEMENTATION MAY RESULT IN THE CONVERSION OF PRIME FARMLAND TO NON-AGRICULTURAL USE.

Impact Analysis: Historically, land use patterns of low density growth have contributed to the conversion of prime farmlands in Bakersfield. A total of 2,523 acres of prime farmland were converted to non-agricultural uses (urban/built-up land and other land) between 1996 and 1998. This resulted in a net total of 534,509 acres of remaining prime farmland in 1998.

Overall, a total of 4,153 acres of agricultural lands, including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local

Importance and Grazing Land, were committed to nonagricultural use between 1996 and 1998.[27]

As is evidenced by the data outlined above, a significant amount of Kern County "prime farmland" has been taken out of cultivation in the recent past. Further, according to Table 6, *County Conversion Ranking*, of the California Farmland Conversion Report 1996-1998, Kern County ranked third in top ten urbanizing counties (Riverside and Orange Counties ranked first and second, respectively). This trend is anticipated to continue as a result of the subdivision of lands associated with the Planning area's forecasted growth. Project implementation has the potential to result in the removal of a substantial amount of prime agricultural land from production. This is deemed an almost "unavoidable" effect of future development since a vast amount of land in the Metropolitan Bakersfield area is defined as "prime agricultural land". In effect, given the extent of prime agricultural land in the Planning area, the impact of the conversion of prime farmland to non-agricultural use is directly related to the designation of land uses (i.e., the General Plan's Land Use Map). More specifically, a significant amount of land defined as prime agricultural land could potentially be converted to other proposed land uses. Land subdivision, the construction of buildings, and the installation of infrastructure would permanently commit these lands to urbanization. This conversion of prime agricultural land to urban uses would be considered a significant and unavoidable impact since the proposed conversion would represent a substantial irretrievable commitment of a limited agricultural resource.

In addition, the conversion of prime agricultural soils in the Planning area could result in the conversion of marginal farmland to active farming in order to compensate for lost prime farmlands. The benefits to be obtained from the development of prime farmland may not be worth the risks that must be assumed. The destruction of prime farmland is almost entirely irrevocable, and the production of crops on non-prime farmland generally requires much more fertilizer, energy, and irrigation inputs compared with production on prime farmlands.

Beyond land development pressures, water availability (and its cost) is also a factor which contributes to determining the agricultural suitability of an area. A significant portion of the land located in the northeastern portion of the Planning area experiences deficient groundwater conditions and inadequate surface water transmission facilities. Due to these conditions, the land in the northeastern portion of the Planning area is not suitable for intensive agricultural production.

The General Plan Update has identified goals and policies which are intended to provide for the planned management, conservation, and wise utilization of agricultural land in the Planning area. While these goals and policies are successful in reducing the significance of the impact of converting prime farmland to non-agricultural use, the degree of impact continues to be considered

[27] Table A-45 of the California Farmland Conversion Report 1996-1998, Kern County-Important Farmland Area (1996-1998 Land Use Conversion).

significant.

Mitigation has been outlined below with respect to buffers and right-to-farm ordinances. Implementation of the General Plan Update's goals and policies, as well as the specified mitigation measures, are anticipated to decrease the rate of the conversion of agricultural land to non-agricultural uses and encourage the conservation of agricultural resources. However, based on the Planning area's trend toward farmland conversion and the General Plan Update's forecasted growth, this impact would not be entirely eliminated. Therefore, this impact would be considered significant and unavoidable.

Goals and Policies in the General Plan Update: The Land Use and Conservation Elements contain the following goals and policies:

LU-P-77 Allow for the continuance of agricultural uses in areas designated for future urban growth.

LU-P-80 Assure that General Plan Amendment proposals for the conversion of designated agricultural lands to urban development occur in an orderly and logical manner giving full consideration to the effect on existing agricultural areas.

CON/SA-G-1 Provide for the planned management, conservation, and wise utilization of agricultural land in the planning area.

CON/SA-G-2 Promote soil conservation and minimize development of prime agricultural land as defined by the following criteria:

- Capability Class I and/or II irrigated soils,
- 80-100 Storie Index rating,
- Gross crop return of $200 or more per acre per year, and
- Annual carrying capacity of 1 animal unit per acre per year.

CON/SA-G-3 Establish urban development patterns and practices that promote soil conservation and that protect areas of agricultural production of food and fiber crops, and nursery products.

CON/SA-P-1 Determine the extent and location of all prime agricultural land within the study area.

CON/SA-P-2 Review projects that propose subdividing or urbanizing prime agricultural land to ascertain how continued commercial agricultural production in the project vicinity will be affected.

CON/SA-P-3 Protect areas designated for agricultural use, which include Class I and II agricultural soils having surface delivery water

systems, from the encroachment of residential and commercial subdivision development activities.

CON/SA-P-4 Monitor the amount of prime agricultural land taken out of production for urban uses or added within the plan area.

CON/SA-P-5 Encourage coordination between the Soil Conservation Service and local planning agencies.

CON/SA-P-9 Protect prime agricultural lands against unplanned urban development by adopting agricultural zoning, agricultural land use designations, and by encouraging use of the Williamson Act and the Farmland Security Zone Program and policies that provide tax and economic incentives to ensure the long-term retention of agricultural lands.

CON/SA-P-10 Encourage landowners to retain their lands in agricultural production.

CONS/SA-P-14 When considering proposal to convert designated agricultural lands to non-agricultural use, the decision making body of the City and County shall evaluate the following factors to determine the appropriateness of the proposal:

- Soil quality
- Availability of irrigation water
- Proximity to non-agricultural uses
- Proximity to intensive parcelization
- Effect on properties subject to “Williamson Act” land use contracts.
- Ability to be provided with urban services (sewer, water, roads, etc.)
- Ability to effect the application of agricultural chemicals on nearby agricultural properties
- Ability to create a precedent-setting situation that leads to the premature conversion of prime agricultural lands
- Demonstrated project need
- Necessity of buffers such as lower densities, setbacks, etc.

Mitigation Measures:

4.7-1 Buffers such as setbacks, berms, greenbelts, and open space areas shall be established to separate farmland from incompatible urban uses.

4.7-2 Right-to-farm ordinances shall be implemented.

IMPLEMENTATION OF THE GENERAL PLAN UPDATE MAY CONFLICT WITH

EXISTING ZONING FOR AGRICULTURAL USE OR A WILLIAMSON ACT CONTRACT.

Impact Analysis: The majority of the lands under LCA contracts are situated in the rural areas in the northwest, southwest, south, and southeast. As a result, it is anticipated that the majority of the land under LCA contracts would not be impacted by the growth forecasted in the General Plan Update. However, by overlaying Exhibit 4.7-3 with the proposed Land Use Map, it is evident that some of the lands under LCA contracts would be lost to future development. Examples of LCA lands designated for uses other than agriculture include Rosedale Ranch situated in the northwest portion of the Planning area, and McAllister Ranch situated in the southwest portion. Removal of LCA contract protection lifts the restrictions specifically aimed at avoiding the conversion of agricultural lands to other uses. With this barrier to development removed, the pressure to develop placed upon neighboring LCA contract lands is further increased. Additionally, landowners would no longer have the benefit of reduced property tax assessments. This lost benefit would create an incentive for the landowner to utilize their property for a more intensive land use such as urban development.

The Conservation Element (Soils and Agriculture) has identified an implementation program with respect to LCA Contracts. More specifically, this program requires that use of Land Conservation Act contracts be encouraged in areas designated for agricultural land uses. Additionally, goals and policies have been established in the General Plan Update which encourage the use of LCA contracts. Although goals, policies and implementation programs are successful in reducing the significance of this impact, this impact is anticipated to remain significant even after compliance with the goals/policies. Therefore, the conflict with LCA contract lands resulting from Project implementation is considered a significant and unavoidable impact.

Goals and Policies in the General Plan Update: Refer to the goals and policies outlined in the *Conversion of Prime Farmland* section above.

Mitigation Measures: No feasible mitigation measures have been identified.

VIII. FINDING REGARDING INFEASIBLE ALTERNATIVES

The City and County, having reviewed and considered the information contained of the

Final EIR, appendices to the Final EIR and the administrative record, finds, pursuant to Public Resources Code 21081 (a)(3) and CEQA Guidelines 15091 (a)(3) that (i) the Final EIR considers a reasonable range of project alternatives and mitigation measures and (ii) specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the alternatives as follows:

NO PROJECT/NO DEVELOPMENT

Implementation of the No Project/No Development Alternative assumes that no additional development would occur; thus, the Metropolitan Bakersfield area would maintain the status quo of existing land use conditions and levels of development in the City of Bakersfield/Planning area. Any development that would occur as part of buildout of the General Plan Update would not occur under this Alternative. By definition, this Alternative prohibits the issuance of any further building permits. This situation would void the implementation of any current or future General Plan for Metropolitan Bakersfield, and would therefore be in direct conflict with California statutes requiring General Plans.

It should be recognized that this alternative is not feasible. Implementation of the General Plan Update is necessary in order to update of the City's land use database, delete redundant/completed policies, goals and programs, and update maps, figures, text, charts and tables in the existing General Plan to reflect current data/information.

EXISTING GENERAL PLAN

As required by Section 15126.6(e) of the CEQA Guidelines, Existing General Plan Alternative describes buildout of the Metropolitan Bakersfield area in accordance with existing zoning and general plan land use designations under the policies and implementing strategies of the current General Plan, adopted in 1990.

Implementation of this Alternative assumes that ultimate buildout of the existing General Plan (1990) would occur. The current General Plan encompassed the same geographic area as that in the General Plan Update. The anticipated growth identified in the current General Plan involved the following projections:

- A net increase of 153,856 dwelling units
- Potential increase in commercial floor area of 46 million square feet
- Potential increase in industrial development of 50 million square feet
- A population increase of approximately 385,000 persons

No land use designations or their associated density standards or floor area ratios, were modified in the General Plan Update. Further, no new land use designations (categories) were added in the General Plan Update. It should be noted that while the General Plan Update identified a demand for an additional 39,500 housing units in response to projected population growth, these units were anticipated in the current General Plan. The General Plan Update proposes the following revisions to the current General Plan:

- Deletion of redundant and/or completed policies, goals and programs.
- Revision to maps, figures, text, charts and tables to reflect updated data/information.
- Update of the City's land use database.
- Update of the Kern Council of Governments (COG) traffic model information.
- Revision to General Plan noise and air quality data based on the new traffic model.

None of the aforementioned revisions to the current General Plan would be made with this Alternative.

EXHIBIT B
STATEMENT OF OVERRIDING CONSIDERATIONS

Pursuant to Section 15093 of the CEQA Guidelines, decision-makers are required to balance the benefits of a project against its unavoidable environmental risks in determining whether to approve a project. In the event the benefits of a project outweigh the unavoidable adverse effects, the adverse environmental effects may be considered "acceptable". The CEQA Guidelines require that, when a public agency allows for the occurrence of significant effects which are identified in the Final EIR but are not at least substantially mitigated, the agency shall state in writing the specific reasons the action was supported. Any statement of overriding considerations should be included in the record of project approval and should be mentioned in the Notice of Determination.

To the extent the significant effects of the project are not avoided or substantially lessened to a level of insignificance, the City and County of Kern, having reviewed and considered the information contained in the Final Environmental Impact Report for the project, and having reviewed and considered the information contained in the public record, and having balanced the benefits of the project against the unavoidable effects which remain, finds that such unmitigated effects to be acceptable in consideration of the following overriding considerations discussion.

The City and County finds that all feasible mitigation measures have been imposed to lessen project impacts to less than significant, and furthermore, that alternatives to the project are infeasible because they have greater environmental impacts, do not provide the benefits of the project, or are otherwise socially or economically infeasible as fully described in the project findings.

The environmental analysis undertaken for the Metropolitan Bakersfield General Plan Update indicated the project would result in contributions to traffic (2020 traffic volumes), air (construction emissions, vehicles miles traveled and consistency with air quality plan), noise (traffic noise, railway noise, aircraft noise and stationary noise sources), and agricultural resources (conversion of prime farmland and conflict with Williamson Act) impacts that would represent a significant adverse environmental effect on a project basis.

The City of Bakersfield and County of Kern as Lead Agency and decision-maker for the project, has reviewed and considered the information contained in both the Draft and Final EIRs prepared for Metropolitan Bakersfield General Plan Update and the public record. The project benefits include the following: [WHAT WOULD I PUT HERE?]

The Lead Agency makes the following finding, pursuant to Section 15093 of the CEQA Guidelines, with regard to the Statement of Overriding Considerations for Metropolitan Bakersfield General Plan Update:

> *California Administrative Code, Title 14, Section 15093(a) states: "If the benefits of a proposed project outweigh the unavoidable adverse*

environmental effects, the adverse environmental effects may be considered 'acceptable'." Based on the above discussion and on the evidence presented, the City of Bakersfield and County of Kern therefore finds that the benefits of the proposed project outweigh the adverse traffic (2020 traffic volumes), air (construction emissions, vehicles miles traveled and consistency with air quality plan), noise (traffic noise, railway noise, aircraft noise and stationary noise sources), and agricultural resources (conversion of prime farmland and conflict with Williamson Act) impacts associated with Metropolitan Bakersfield General Plan Update Project, which can not be eliminated or reduced to a level less than significant.